Measuring the Success of the Canadian Rangers

A REPORT PREPARED BY

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EXECUTIVE SUMMARY

This project on "Measuring the Success of the Canadian Rangers: Using Statistical Methods, Gender Based Analysis Plus, and Stakeholder Dialogue to Discern Culturally Relevant and Appropriate Metrics" was undertaken pursuant to a Department of National Defence (DND) Defence Engagement Program (DEP) Targeted Engagement grant from 2018-2020. In close cooperation and partnership with 1st Canadian Ranger Patrol Group (1 CRPG), the project team developed a series of metrics and indicators that might be used to evaluate the contributions, successes, and shortcomings of the Canadian Rangers as a component of the Canadian Armed Forces (CAF) Reserves within a Northern Canadian context. The project is closely aligned to commitment #108 in Canada's 2017 defence policy, *Strong, Secure, Engaged*, to "enhance and expand the training and effectiveness of the Canadian Rangers to improve their functional capabilities within the Canadian Armed Forces."

In this study, our project team systematically analyzed publicly-available reports, media coverage, and academic commentary on the Canadian Rangers as well as broader Government of Canada and CAF Arctic priorities. We also drew significant insights from focus group conversations and community-based interviews with a diverse group of Rangers from across 1 CRPG. The report blends descriptive, explanatory narrative (with extensive first-hand quotes providing the insights of Canadian Rangers in their own words) to identify critical success factors and specific, measurable indicators of whether the organization is achieving desired outcomes.

We propose metrics and indicators of success that embrace the Canadian Rangers' distinct forms and terms of CAF service as relevant members of the Defence Team with extensive experience operating in austere conditions who are willing to share their local and traditional knowledge about lands and waters, whilst providing practical support for activities in what many Southern Canadians consider to be "extreme environments." As members of their local communities, the Rangers also provide a robust and immediate response to the broad spectrum of security and safety issues facing isolated communities. By applying various concepts of resilience (community disaster, community, Indigenous, and individual) to frame Canadian Rangers' myriad roles (formal and informal), contributions, and benefits, our research confirms that metrics of organizational success must incorporate both DND/CAF priorities as well

as contributions to collective and individual resilience that benefit communities, help to meet broader government objectives (at federal, territorial, hamlet, and Indigenous government levels), and promote Crown-Indigenous reconciliation. The concluding chapter provides suggestions for proposed next steps.

Our metrics reflect academic literature emphasizing that the best way to build collective and individual resilience is through long-term commitments and building from the bottom-up. In some chapters and sections, we employed a conceptual, "top-down" approach to identify indicators based on DND/CAF documents and previous research on Ranger roles, established practices, and relationships. Other parts of this report reflect a "bottom-up," empirically-driven approach to identifying indicators based upon interviews and focus group discussions with Rangers over the past two years.

METRICS OF SUCCESS

These measures reflect desired outcomes for the Canadian Rangers and for 1 CRPG, and may serve as key performance indicators to show progress towards specific goals or critical success factors. They reflect strategic, operational, tactical, and social levels.

1. 1 CRPG enjoys strong relationships with other federal departments and agencies, territorial governments (particularly through emergency measures organizations), and Indigenous governments and organizations.

2. At the patrol level, Canadian Rangers have strong relationships with the local hamlet or First Nation government(s), Royal Canadian Mounted Police (RCMP) detachment, volunteer Ground SAR organization, Canadian Coast Guard Auxiliary, Territorial emergency measures organizations, and/or other relevant stakeholders.

3. Observations from Canadian Ranger activities feed into the Canadian Army Lessons Learned Process, particularly on the sustainment and conduct of domestic and sovereignty operations.

4. Canadian Rangers, as a continuous military presence in Arctic and Northern communities, are recognized for their role in supporting, promoting, and facilitating cooperation and collaboration with domestic partners on a wide range of safety, security, and defence issues.

5. Canadian Rangers are recognized and effectively used as part of Canada's domain awareness, surveillance, and control capabilities in the Canadian Arctic and North. As the "eyes, ears, and voice" of the CAF in their home areas, Rangers have access to appropriate channels to report on potential threats to or violations of transportation systems, border integrity, and environmental protection in the Arctic and North.

6. Canadian Rangers provide routine and deliberate collection and dissemination of information to support land, coastal, and inland waterway domain awareness by the CAF and partners.

7. Canadian Ranger patrols are trained and prepared to support deliberate or contingency operations within their area of responsibility (AOR) in all weather conditions.

8. Rangers are consistently engaged in supporting training activities at or staged out of the CAF Arctic Training Centre (CAF ATC) in Resolute Bay, Nunavut.

9. Canadian Ranger advice is sought and accepted during all phases of an exercise in 1 CRPG's AOR.

10. Canadian Rangers demonstrate interoperability with other CAF elements (such as Immediate Response Units and Arctic Response Company Groups).

11. Canadian Rangers are recognized as force multipliers during CAF deployments into Canada's Northern Territories.

12. The Canadian Ranger relationship with other CAF units/elements is based on mutual respect that manifests in a productive exchange of skills that supports and strengthens the CAF's ability to conduct Domestic Operations. Canadian Rangers are appreciated for the roles that they do perform, and are not expected to become clones of the Regular Force or Primary Reserves with combat roles.

13. Canadian Rangers use their training, organization, and/or equipment to facilitate and support non-military regional and community events and activities.

14. 1 CRPG is able to provide support to other federal departments, provincial/territorial authorities, Indigenous governments, associations, and organizations, non-governmental organizations, and scientists in conducting research, monitoring, and domain awareness activities that contribute to Arctic security and resilience.

15. The CAF requests and receives the support of the local Canadian Ranger patrol for all CAF operations and exercises taking place in a patrol's AOR or adjacent territory.

16. Canadian Rangers maintain an overt presence at strategic locations, such as the Northwest Passage.

17. Canadian Rangers are able to complete NWS patrols and other critical infrastructure security inspections in remote and isolated locations as assigned, when seasonal, weather, and environmental constraints make it safe to do so.

18. Canadian Rangers are recognized for their ability to function effectively on land and water (in both a frozen and liquid state) and can respond effectively to various situations, either independently or in the support of other organizations.

19. Canadian Ranger patrols coordinate their efforts with other community-based organizations responsible for maritime domain awareness and marine safety (such as the Canadian Coast Guard Auxiliary, Nunavut Inuit Monitoring Program, and/or Inuit Guardians).

20. Canadian Rangers are provided with a C-19 rifle, clothing, and an appropriate allocation of equipment that reflects the purpose and intent of the Canadian Ranger mission and does not detract from its ethos as a "lightly-equipped, self-sufficient" organization.

21. Canadian Rangers are reimbursed for approved claims for loss of or damage to personal property used during an approved operation or task in a timely manner.

22. Territory-level or regional statistical analysis of Canadian Rangers in each territory shows that Indigenous participation rates are proportionate to the Indigenous percentage of the territorial or regional population as a whole.

23. Canadian Ranger patrols are reflective of local demographics in terms of Indigenous participation rates.

24. Increasing numbers of women are serving in Canadian Ranger leadership positions across the unit.

25. Female Canadian Rangers are respected and feel welcomed and appreciated as Rangers, and their contributions are promoted by the unit and by the CAF more generally.

26. The size of each Ranger patrol is appropriate given the population size and demographics of the community in which it is based, and is diverse in terms of age and gender. Patrols should not be forced to expand in numbers for political reasons from outside the local area that are not grounded in improving the Rangers' "effectiveness and functional capabilities within the Canadian Armed Forces (CAF)," and patrol members have a direct say in determining which new community members should be invited to join their patrol.

27. Canadian Rangers are involved in prevention and preparedness through hazard identification and mitigation of vulnerabilities in their local area/region, and the provision of updates on area resources and assets that are shared with key community, regional, and federal stakeholders.

28. Canadian Ranger patrols are prepared to support a whole of community response to an emergency or disaster, including established relationships with other organizations and the hamlet office.

29. Canadian Rangers are prepared to assist with mass rescue operations, mass casualty events, and community evacuations, and have contact with nearby communities in case they have to work together in case of emergency.

30. Canadian Rangers receive navigation, first aid, and other forms of training that they can apply to Search and Rescue. Certain types of SAR-related training should also be planned and scheduled in consultation with other territorial and local first responder organizations to create synergies and economies of effort and costs where possible.

31. Canadian Rangers understand and follow search and rescue (SAR) activation and control procedures established by 1 CRPG in coordination with territorial emergency management organizations (EMOs) and Joint Task Force (North).

32. Canadian Rangers are trained and prepared to assist their communities and public health agencies in response to a pandemic or other large-scale health emergency.

33. The Canadian Ranger patrol functions as a social network in the community that fosters a sense of community, feelings of belonging and pride, and generating shared values and norms.

34. Community stakeholders recognize the Canadian Ranger patrol as a platform for listening, sharing, and identifying issues within a community; bolstering community self-reliance; and providing a space for community members to learn and apply traditional and local knowledge and skills.

35. The Canadian Ranger organization strengthens local leadership by identifying experienced and new leaders, and providing the time and space required for their development.

36. Canadian Ranger training and activities allow for intergenerational skill sharing and leadership development.

37. Both men and women in Canadian Ranger leadership positions are recognized for their contributions to community health and resilience.

38. Members of a Canadian Ranger patrol use their links with other community groups and relationships with higher levels of government and outside organizations to positively affect the health and well-being of their community.

39. Canadian Rangers are involved in community events and other community-building activities, and contribute to other groups and organizations in their communities (eg. outreach to schools, support to volunteer firefighters).

40. Canadian Rangers are actively involved in supporting regional, territorial, and national events.

41. Members of a Canadian Ranger patrol embrace their support to the Junior Canadian Ranger (JCR) program as a core responsibility and actively engage in JCR activities.

42. Where applicable, a Canadian Ranger patrol serves as a platform for the intergenerational exchange of Indigenous knowledge and skills.

43. Experienced members of a Canadian Ranger patrol teach traditional skills and knowledge

to newer members and/or the Junior Canadian Rangers, local cadet corps, or school children.

44. The Canadian Ranger patrol supports the design of culturally-appropriate curriculum and activities for the JCR program.

45. The Canadian Rangers and JCR program are promoted as examples or expressions of reconciliation with Indigenous peoples based on recognition of rights, respect, co-operation, and partnership.

46. The membership of a Canadian Ranger patrol is reflective of local Indigenous voices.

47. Particularities associated with Canadian Ranger service are acknowledged and accounted for to ensure that the unique risks of Canadian Ranger training and employment are managed fairly and effectively.

48. Long-serving Canadian Rangers are publicly acknowledged for their dedicated service to their communities and to Canada, which not only bolsters individual self-esteem but also serves to enhance public understanding of Canadian Ranger service and reduce misunderstanding about deaths of elderly Rangers while still in service.

49. Challenging, practical training is provided to Canadian Rangers in a manner that is culturally attuned, well sequenced, and proportionate to the strengths and limitations of individual patrols.

50. Long-serving Canadian Rangers who release or pass away are recognized for their contributions.

INDICATORS OF SUCCESS

These specific measurable indicators might be used to gauge progress towards a desired impact for the Canadian Rangers and for 1 CRPG.

1. Each community with a Canadian Ranger patrol is visited at least once each fiscal year by a Ranger Instructor and receives training on and/or exercises the various individual and collective "battle task standards" listed above.

2. Canadian Ranger patrols practice and exercise skills and competencies identified in the individual and collective "battle task standards" during Type 1 patrols when Ranger Instructors are present in the community and during organized activities (such as monthly meetings) when a Ranger Instructor is not present.

3. Factors of distance, terrain/ice conditions, and analysis of previous NWS patrols are factored into robust risk assessments and mitigation measures that minimize the risk to Canadian Rangers who conduct patrols to remote radar sites.

4. Canadian Ranger equipment is managed and maintained in accordance with military life-cycle management processes and sustainment plans, with due respect for challenges associated with limited capability for logistical support and sustainment, Northern environmental conditions, and limited capabilities of patrols to accept and maintain military equipment.

5. The Canadian Rangers are written into the community emergency plan and/or are aware of how they might be engaged as a group to serve as first responders in an emergency or disaster.

6. Canadian Rangers elected to leadership positions have access to DP2 Patrol Commander training or have equivalencies confirmed by the Commanding Officer.

7. Canadian Ranger patrols hold regular monthly meetings to ensure a continued state of readiness, conduct training, maintain established lines of communication, and perform wellness checks of their members.

8. Canadian Rangers maintain a viable and cooperative relationship with JCR Instructors and Adult Committees (or other local stakeholders/advisors) in support of JCR patrols.

9. Resources (personnel and financial) are sufficient so that the JCR program is not delivered at the expense of the Canadian Ranger organization (and vice versa).

10. The Canadian Ranger organization facilitates community access to other government and non-government partners and provides a foundation for member contributions to Community-Based Monitoring (CBM) programs.

INDICATORS OF CAPACITY

These specific measurable indicators might be used to help assess the capability and effectiveness of Canadian Rangers, Canadian Ranger patrols, and 1 CRPG as an organization.

1. What percentage of Canadian Ranger patrol members have environmentally-appropriate clothing to operate safely in their local area of responsibility at all times of the year?

2. What number and percentage of patrol members own a snowmobile?

3. What number and percentage of patrol members own an ATV?

4. What number and percentage of patrol members own a boat?

5. There is a stable or increasing number of women serving as Canadian Rangers in 1 CRPG, not just in aggregate but by region and individual patrol.

6. Canadian Ranger patrols represent an appropriate balance of members from various age groups (including elders).

7. Canadian Rangers have opportunities to attain new training skills and training due to their support of and participation in research, monitoring, and other activities stemming from provision of services arrangements.

8. Canadian Rangers are placed on the appropriate class of service for tasks that they perform to ensure they receive suitable compensation as well as related healthcare and other benefits should they become ill or injured while on duty.

9. Canadian Rangers share food that they catch on patrol with other community members, particularly elders and families in need.

10. Canadian Rangers are considered for other military or civilian-offered courses that would assist with the specific performance of their duties and/or their integration with other elements of the CAF or civilian agencies.

11. 1 CRPG keeps track of which Canadian Rangers are also members of other safety-related volunteer organizations at the community level, such as the Canadian Coast Guard Auxiliary, Ground Search and Rescue, Inuit Guardians, and Civil Air Search and Rescue Association (CASARA).

12. The role of Elders is recognized and promoted within a Canadian Ranger patrol.

13. Ranger Instructors respect the traditional knowledge of Canadian Rangers and training activities reflect culturally-appropriate modes of teaching, including sufficient time to translate instructions into Indigenous languages.

14. Canadian Rangers fluent in Indigenous languages use these during patrol activities and encourage younger members of the patrol to do so.

15. Informal monitoring of the health and fitness of Canadian Rangers is conducted at the patrol level, with due consideration for age and other variables, and accommodating diverse forms of Ranger service that "promote, from an educational or administrative perspective, the general efficiency of their patrol, the [Canadian Ranger] sub-component and the CAF."

16. Canadian Rangers report illnesses and injuries to 1 CRPG headquarters and these are processed and recorded appropriately.

17. Canadian Rangers are aware of the health benefits available to them as Reservists.

18. Canadian Rangers have access to culturally-appropriate and -sensitive psychological support services.

19. Suicides and injury-related deaths of Canadian Rangers (currently serving and former) are tracked and compared these with general territorial or regional rates.

20. Canadian Rangers have access to leave from full-time jobs to serve as Reservists.

21. Analysis of per capita Canadian Ranger income by patrol to see if there are community or regional disparities. Please note that this indicator has the benefit of "data affordability" in terms of time and resources, but it is silent on individual motivations and constraints.

22. Canadian Ranger satisfaction with the new .308 C-19 rifle compared to the old .303 Lee Enfield, as well as frequency that they use it for hunting.

23. Forms of Canadian Ranger reporting to headquarters are designed to accommodate diverse education levels and acknowledge that English is not a first language for some Rangers.

24. Collecting statistics on the number of JCRs who become Canadian Rangers.

25. 1 CPRG and its partners continue to discern how diverse Northern peoples and groups may have different interpretations of the Canadian Rangers' "success" in fulfilling CAF and community roles.

PROPOSED NEXT STEPS

1. Determine how to conduct proper testing and validation of the proposed indicators, as well as identification of those we have missed, with a broader array of members of 1 CRPG, the Defence Team, and Northern stakeholders.

2. Identify which of the indicators that we have derived from our research with 1 CRPG also apply to the other Canadian Ranger Patrol Groups.

3. Conduct a similar scoping study to measure the success of the Junior Canadian Ranger (JCR) program in 1 CRPG.

4. Conduct a detailed study on women in the Canadian Rangers.

5. Produce more robust statistics on Indigenous participation rates in 1 CRPG.

6. Conduct a careful assessment of the activation of the Canadian Rangers as part of the COVID-19 pandemic response in northern communities.

7. Conduct a more thorough analysis of how the Canadian Rangers fit with the Canadian Army's Arctic concept and plans for North American defence modernization.

INTRODUCTION

P. WHITNEY LACKENBAUER

Pursuant to this research project, we have worked with 1st Canadian Ranger Patrol Group (1 CRPG) to develop measures to evaluate the contributions, successes, and shortcomings of the Canadian Rangers as a component of the Canadian Armed Forces (CAF) Reserves within a Northern Canadian context. While much anecdotal evidence exists pointing to the Rangers as a military "success story,"[1] some commentary suggests the opposite[2] and no robust set of metrics or indicators has been devised to assess the organization in a systematic way. Reports by the Director General of Reserves and Cadets (2000), Defence Research and Development Canada (2014), and the Department of National Defence (DND)/CAF Ombudsman (2017) provide insight into various benefits and shortcomings of the Canadian Rangers organization,[3] but the delimited focus and scope of these reports precludes broader evaluation of the effectiveness of the Rangers in addressing a wide range of military and Northern community-level needs.

As Canada's defence policy highlights, "spanning three Territories and stretching as far as the North Pole, Canada's North is a sprawling region, encompassing 75 percent of the country's national coastlines and 40 percent of its total land mass." This tremendous expanse, "coupled with its ice-filled seas, harsh climate, and more than 36,000 islands," poses unique monitoring and surveillance challenges. Furthermore, Canada's three Northern territories have the lowest population density of any region in North America – a significant constraint on conventional operations that also amplifies the benefits of drawing on access to local resources. Canada's 2017 defence policy, *Strong, Secure, Engaged (SSE)*, notes that "the region is spotted with vibrant communities, many inhabited by Canada's Indigenous populations. These communities form an integral part of Canada's identity, and our history is intimately connected with the imagery and the character of the North."[4]

As part-time, non-commissioned members of a subcomponent of the Canadian Armed Forces (CAF) Reserves, the Canadian Rangers'

official mission is "to provide a military presence in sparsely settled northern, coastal and isolated areas of Canada that cannot conveniently or economically be provided for by other components of the Canadian Forces."[5] With approximately 5000 members across the country, Rangers live in more than 200 Canadian communities and speak "26 different languages and dialects, many Indigenous."[6]

There are five Canadian Ranger Patrol Groups (CRPGs) across Canada, each encompassing a distinct geographical area. This report focuses on 1 CRPG, the largest military unit in Canada with 1300-1400 active Rangers in 61 patrols across Yukon, the Northwest Territories, Nunavut, and northern British Columbia.[7] The majority of Canadian Rangers in 1 CRPG are of Inuit or First Nations descent. They have spent much of their lives on the land, embody the cultural diversity of the North, and represent the wide range of languages spoken by Northern Canadians. As the eyes, ears, and voice of the CAF in the North, southern military units rely on and learn from the experience and knowledge of the Rangers to survive and operate effectively in Arctic and Subarctic environments. The Canadian Rangers not only benefit their communities in a direct social and economic sense, they also empower Northern Canadians who mentor and educate other members of the CAF on how to manage, respect, and ultimately care for their homeland.[8]

Creating an organization that successfully mobilizes Canadians living in remote regions and situates them appropriately within the defence team has entailed moving beyond conventional military structures and practices. The Rangers have proven their value in recent decades by striking an appropriate balance between their military and community contributions. As members of their local communities, the Rangers also represent an important source of shared awareness and liaison with community partners and, by virtue of their capabilities and location, regularly support other government agencies in responding to the broad spectrum of security and safety issues facing isolated communities.[9] Accordingly, they are the CAF's first responders in most safety and security situations in and around Northern communities,[10] and also assist with search and rescue in their communities both as volunteers and as an official military tasking. Their familiarity with local cultures, fluency in Indigenous languages, and vested interest in the welfare of their fellow community members and their homelands make them valuable, trusted assets.

This study analyzes publicly-available reports, media coverage, and academic commentary on the Canadian Rangers and Government of Canada and CAF Arctic priorities, and draws upon insights from focus group conversations with Rangers. In general, our research confirms that metrics of Ranger success must measure not only the organization's contributions to DND/CAF priorities but also contributions to collective and individual resilience that benefit communities, help to meet broader government objectives (at federal, territorial, hamlet, and Indigenous government levels), and promote reconciliation. Measures must account for the Rangers' distinct forms and terms of CAF service as relevant members of the Defence Team who have extensive experience operating in austere conditions and are willing to share their local and traditional knowledge about lands and waters, whilst providing practical support for activities in what many Southern Canadians consider to be "extreme environments."[11]

DETAILED DISCUSSION

In the twenty-first century, the Canadian Rangers have emerged from the shadows to become a highly visible example of diversity and inclusion in the Canadian Armed Forces (CAF). Creating an organization that successfully mobilizes Canadians living in remote regions and situates them appropriately within the defence team has entailed moving beyond conventional military structures and practices. The Rangers are neither a military nor an Indigenous program (as they are sometimes misidentified), but rather a subcomponent of the Reserves that embodies the benefits of leveraging the unique skill sets of Canadians from diverse ethnic and social backgrounds to support home defence and public safety. As a bridge between cultures and between the civilian and military realms, the Rangers represent a successful integration of national security and sovereignty agendas with community-based activities and local stewardship. This practical partnership, rooted in traditional knowledge

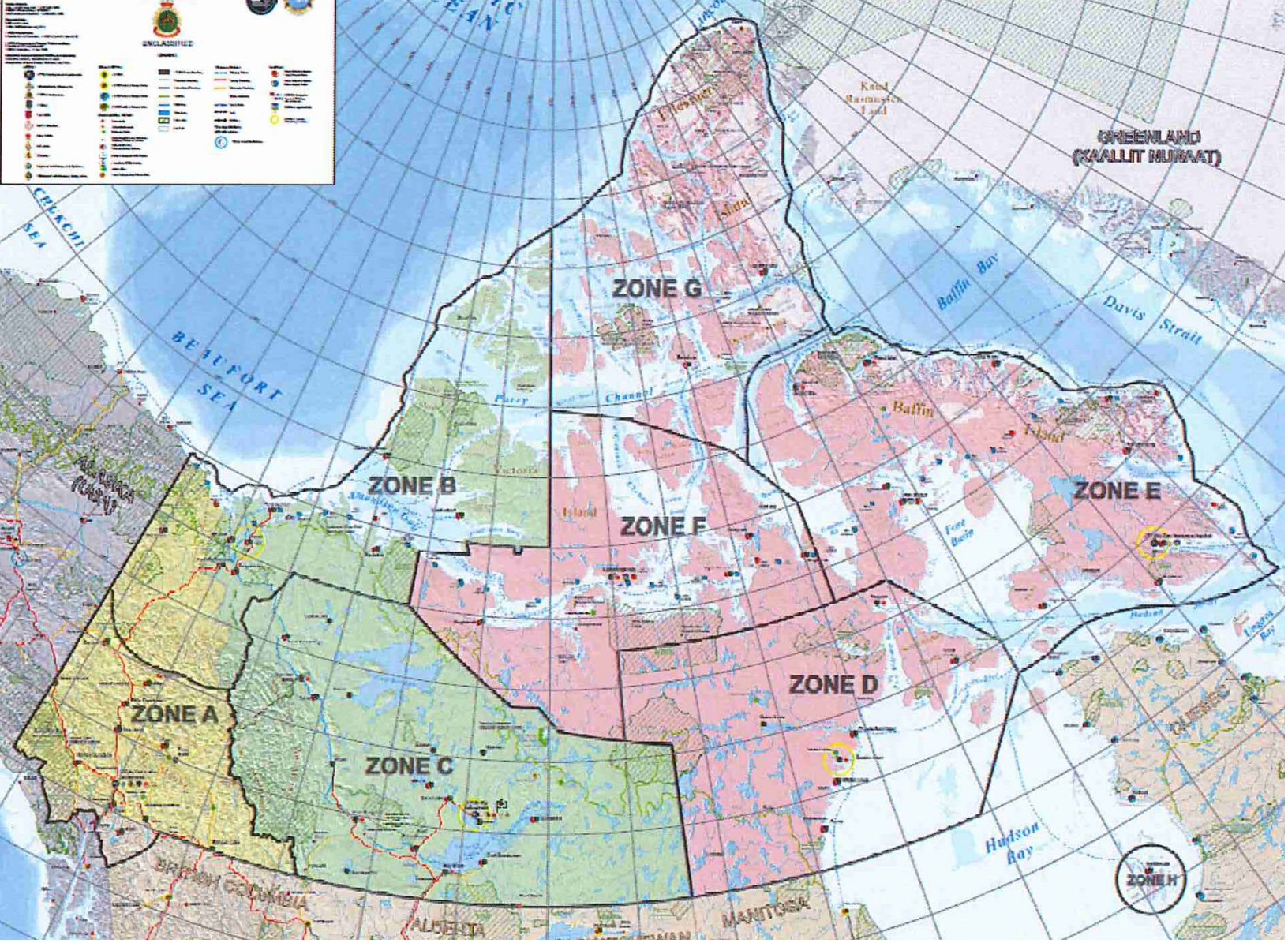


FIGURE 0-1 : *Map of 1 CRPG patrols*

and skills, promotes cooperation, communal and individual empowerment, and cross-cultural understanding.[12]

The Canadian Rangers' unique terms of service and roles, their command structure, their practical contributions, and the socio-political contexts in which they operate have received a modest amount of academic and media attention. Usually based upon anecdotal evidence, these narratives highlight how the Rangers provide an important outlet for Indigenous peoples and other Northerners who wish to serve in the defence of their country without having to leave their communities. Ranger activities also allow community members to practice and share traditional and local skills, such as living off the land, with people from outside their cultures as well as across generations within them. These skills are central to Northern identities, and there is a persistent worry that these will be lost unless individuals have opportunities to exercise them and share them with younger generations. Accordingly, by celebrating traditional and local knowledge and skills, and encouraging and enabling community members to go out on the land and share their knowledge and expertise, the Rangers can play an important role in supporting the retention or expansion of core cultural competencies. In turn, the Ranger concept is inherently rooted in the idea that the unique knowledge of Northern peoples can make an important contribution to effective military operations.

The key Arctic defence documents produced by the Canadian military over the last decade all emphasize integrated defence team and

whole of government approaches to meet challenges across the mission spectrum.[13] Within these frameworks, the Rangers are situated as facilitators or enablers for other military components providing combined response capabilities. Lessons learned or post-exercise reports from CAF Arctic activities regularly highlight the benefits of this partnership and the need to leverage the Rangers' knowledge and capabilities to facilitate operations and further develop Regular and Primary Reserve Force units' operating skills in remote areas. Rather than dismissing the Rangers for not simply replicating existing army capabilities that reside in southern-based units,[14] Arctic exercises affirm the value of having access to subject-matter experts with extensive experience operating in austere conditions who are willing to share their local and traditional knowledge. In carefully analyzing these DND/CAF documents, we discern explicit and implicit expectations for the Rangers and suggest metrics to assess whether their current training and equipment are sufficient to perform their expected roles in operations and other tasks.

The *SSE* vision for a Canada that is strong at home sees our "sovereignty well defended by a Canadian Armed Forces also ready to assist in times of natural disaster, other emergencies and search and rescue."[15] Due to their capabilities and presence, the Canadian Rangers support other government agencies in preventing, preparing for, responding to, and recovering from the broad spectrum of emergency and disaster scenarios facing their communities.[16] Rangers strengthen the disaster resiliency of their communities through their organization, leadership, and training; their ongoing involvement in community preparedness and hazard risk analysis; their social relationships and networks; and the trust they have earned from fellow community members.

How does the local and Indigenous knowledge of Canadian Rangers contribute to emergency planning and disaster response? Furthermore, how do Rangers fit within the Government of Canada's vision for healthy, empowered individuals and Northern communities?[17] In a 2010 submission to the Senate Standing Committee on National Security and Defence, former Kitikmeot Inuit Association president Charlie Lyall highlighted the "important roles" that Canadian Rangers "play in their home communities – from search and rescue, to emergency response, to helping with local events. The Rangers have also evolved as an organization that allows Inuit

elders and individuals with extensive experience on the land to share their traditional knowledge and skills with younger Inuit." In short, the Rangers offer "local leadership and capacity building" in their communities.[18]

Framing Canadian Ranger contributions using various concepts of resilience yields a useful set of metrics to measure the success of the organization. How do the Rangers contribute to the resilience of their communities? Does the organization actively build community resilience, and if so how can we gauge its success in doing so?

Resilience is a multifaceted term with many definitions and little consensus on its core characteristics across the wide array of disciplines that use the concept.[19] Whether applied to nations, communities, or individuals, resilience focuses on the ability to cope with and respond to adversity, disturbance, and/or change. A resilient system can withstand abrupt disturbances in a limited time frame and more gradual forces of change over a longer period. While some scholars adopt the term to describe a system's ability to resist a shock or disturbance, others explain it as the ability to withstand and "bounce back," or to adapt and "bounce forward."[20]

Given the breadth and depth of their involvement at the community level, the Canadian Rangers are tied to four categories or components of resilience: community-based disaster resilience, community resilience, Indigenous resilience, and individual resilience.[21] In chapters four to seven, we define these concepts and apply them to the Rangers in 1 CRPG. These categories of resilience are interconnected, with capacity-building in one area often having an impact on the others. In general, efforts to build resilience in each category take a strengths-based approach, focused on identifying and building on a system's strengths rather than its deficits.

Towards these ends, we have adopted a multidisciplinary investigative methodology to discern measures that might be used to gauge the Rangers' contributions to individual and communal health and empowerment. Sources include priorities identified during the ongoing federal Arctic and Northern Policy Framework consultation process, Mary Simon's New Shared Arctic Leadership Model consultations (2016-2017), and other federal and territorial government reports and studies, as well as a systematic review of academic literature on Northern safety and security concerns, capacity building, community resiliency, and socio-cultural indicators.

After preliminary literature reviews, the project team engaged in targeted stakeholder dialogue to discern culturally- and gender-appropriate metrics that can be used to measure operational and socio-political benefits or shortcomings that reflect military, Government of Canada, and Northern societal priorities. In this sense, we were animated by the philosophy of community-collaborative research – in this case, with the community being 1 CRPG. ArcticNet researchers define community-collaborative research as "an overarching term that encompasses different approaches to research (eg. community-engaged research, community-based participatory research, community-based monitoring) that involves engaging local communities and individuals in the research process with the goal of sharing or co-generating knowledge to understand complex problems or bring about change through policy."[22] The core of this philosophy is forging a close partnership between researchers and communities, which are involved in the process in a meaningful, substantive way.

In framing our study, the research team embraced the principles of Gender Based Analysis Plus (GBA+) approaches by incorporating a diversity of participants and seeking the perspectives of non-traditional partners in its design. Our team consists of a balance of men and women, both in terms of the academic researchers (2 men and 1 woman), the primary 1 CRPG advisors (1 man and 1 woman), and focus groups and interviews with Rangers from each of the three Northern territories. Rangers from various cultural groups (Inuit/Inuvialuit, First Nations, Métis, and non-Indigenous), who are attuned to the complex social structures within various Northern communities, played an

GBA+

"INTERSECTIONALITY RECOGNIZES THAT A PERSON'S EXPERIENCE WILL BE DIFFERENT THAN ANOTHER'S BASED ON THEIR PARTICULAR INTERPLAY OF RACE, ETHNICITY, INDIGENEITY, GENDER, CLASS, SEXUALITY, GEOGRAPHY, AGE, AND ABILITY."

Murdered and Missing Indigenous Women Inquiry, *Executive Summary of the Final Report*, 11.

essential role in ensuring that recognized roles and protocols for community members of different genders and age groups, and those with particular livelihoods and specialized knowledge, are respected and reflected in this research.

In selecting and framing indicators, we continuously strived to consider inclusiveness to ensure that our observations, as a whole, reflect the voices, interests, and priorities of all people and groups represented in the diverse Canadian Rangers organization. The contributions of Inuit serving as Rangers in the Far North dominate most national media coverage, while First Nations and Métis in the Northwest Territories and Yukon, as well as non-Indigenous Northerners serving in 1 CRPG, receive significantly less attention. Accordingly, our engagement activities have involved representatives from all communities in the , in hopes that our measures of success and effectiveness reflect the diverse cultural backgrounds of Rangers throughout the patrol group. Territorial North

We hope that the measures we propose to gauge the success of the Rangers help to advance military understandings of the Rangers' roles, training, and contributions; to address the needs of local communities; to build capacity; and to inform decision-making at local, regional, and national levels. Our goal is to provide broader and deeper insights to 1 CRPG and to the Defence Team more generally, while also supporting the Government of Canada's priority to determine how Canada can "respond more effectively to local knowledge needs, increase the capacity of Arctic residents to participate in Arctic research initiatives, collaborate with territorial and provincial institutions, and better integrate Indigenous knowledge into decision-making."[23]

WORKPLAN AND METHODS

By adopting Gender Based Analysis Plus (GBA+) and community-collaborative research approaches[24] which incorporate a diversity of participants and seek the perspectives of non-traditional partners, our collaborative, interdisciplinary approach was designed to reflect both DND/CAF and Northern peoples' priorities. This is closely aligned to *Strong, Secure, Engaged* commitment #108 to "enhance and expand the training and effectiveness of the Canadian Rangers to improve their functional capabilities within the Canadian Armed Forces," as well as other *SSE* priorities.

Following preliminary literature reviews, Lackenbauer, Kikkert, and Captain Melanie Parker (first as training officer and later as officer commanding "C" Company, 1 CRPG) engaged in targeted stakeholder dialogue with 1 CRPG members at Canadian Ranger and Junior Canadian Ranger (JCR) leadership meetings in Yellowknife in 2018 and 2019 to discern metrics that can be used to measure operational and socio-political benefits (or shortcomings) that reflect military, Government of Canada, and Northern societal priorities. Furthermore, in the spirit of community-collaborative research, Kikkert and Lackenbauer held focused meetings with members of Ranger patrols in the Kitikmeot region in spring and fall 2019, as well as early

2020, and co-hosted a Kitikmeot Roundtable on Search and Rescue in Cambridge Bay, Nunavut, in winter 2020. Lackenbauer also enjoys regular contact with 1 CRPG Rangers, headquarters staff, and Ranger Instructors pursuant to his role as Honorary Lieutenant Colonel of that unit.

Jennifer Arthur-Lackenbauer, a social research consultant, conducted detailed statistic analysis of basic data provided by 1 CRPG. These appear as appendices to the main report. She also diligently copy edited, formatted, and laid out the final report.

Research assistants Corah Hodgson and Ryan Dean helped with gathering and coding newspaper stories about the Canadian Rangers. Bianca Romagnoli, a doctoral candidate in anthropology at UCLA who is conducting research with 1 CRPG pursuant to her dissertation, offered helpful feedback on the draft report, as did Dr. Magali Vullierme, a postdoctoral fellow with the North American and Arctic Defence and Security Network (NAADSN), and Justin Barnes, a research assistant with NAADSN.

Our sincerest gratitude to Lieutenant Colonel Timothy Halfkenny and his staff at 1 CRPG Headquarters in Yellowknife for their guidance and enthusiastic sharing of ideas at various leadership meetings in Yellowknife. In particular, Captain Parker shared ideas that led us to initiate this project, co-convened a wonderful session with Rangers from across 1 CRPG at the JCR Patrol Commander Leadership meeting in Yellowknife in January 2019, and provided substantive feedback on draft chapters. Furthermore, our thanks to the many Ranger Instructors who shared their insights during meetings in Yellowknife, at JCR camps in Whitehorse, and during visits to Ranger patrols across the North.

Our final, and deepest, thanks go to the Canadian Rangers from across the Northern Territories. As teachers, mentors, guides, and subject matter experts, these remarkable people dedicate their time, energies, and expertise to the Canadian Armed Forces and to their communities. Their commitment to the North, and to Canada, is unmistakable and appreciated. We hope that this study does justice to the knowledge and insights that they have shared, and that the indicators that we propose will help the military to further support the important work that they

do. We also believe that systematic research will reinforce why we consider the Rangers to be one of Canada's great "success stories" that, while it often defies theory, works well in practice.

CONNECTION TO DND MINDS PRIORITIES

This project relates to the Defence Team Engagement Priority for 2018-19 on "Territorial defence and Arctic." By providing metrics to measure the contributions of the Rangers to the CAF and to their communities, it identifies opportunities for the CAF to "work with partners to address long-term challenges in the Canadian Arctic, including those posed by climate change." Furthermore, it informs questions about how the CAF can "optimize its role in protecting and defending Canada in realms such as force projection, domain awareness, sovereignty sustainment, and operational readiness." This project also deals extensively with themes related to diversity and well-being in the CAF, how the role of the Reserves may evolve in the future, the need to balance the CAF level of ambition with available resources, and force planning demands that the Government of Canada could place on the CAF.

This project also relates to various *SSE* priorities related to leveraging Canada's diversity and inclusion, total health and wellness, Army operational effectiveness, a changing Arctic and growing complexity associated with climate change in the Canadian North, enhancing the roles and capabilities of the Reserve Force, and enhancing Arctic capability (including initiative #108: "enhance and expand the training and effectiveness of the Canadian Rangers to improve their functional capabilities within the Canadian Armed Forces").

We engaged neither the Canadian Defence Academy (CDA) Research Ethics Board nor the federal Social Sciences Research Review Board to approve of or review this inquiry because it was a subject matter expert (SME) engagement discussion. The questions and topics were basic fact-finding questions with no experimental or theoretical element to them.

BACKGROUND AND CONTEXT

P. WHITNEY LACKENBAUER

1st Canadian Ranger Patrol Group (1 CRPG) is the largest military unit in Canada with more than 1850 Canadian Rangers in 61 patrols based in 65 communities across Yukon, the Northwest Territories, Nunavut, and northern British Columbia. Its area of responsibility encompasses approximately four million square miles (40% of Canada's landmass), including 8000 km of coastline from east to west. Its primary mission is to "force generate"[1] Canadian Ranger patrols that are prepared to respond to emergencies, conduct sovereignty and nation-building activities, and support other CAF assets and other government departments (OGDs), while delivering the Junior Canadian Ranger (JCR) program throughout the North.

The majority of Canadian Rangers in 1 CRPG are from Indigenous communities and their command structure – wherein community-based patrols vote in their own leadership – reflects the grassroots nature of the Ranger organization. As the "eyes, ears, and voice" of the CAF in the North, southern military units rely on and learn from the experience and knowledge of the Rangers to survive and operate effectively in Arctic and Subarctic environments. The Canadian Rangers not only benefit their communities in a direct social and economic sense, they also empower Northern Canadians who mentor and educate other CAF members.

My writings over the years have highlighted the Rangers' practical contributions to the defence team in the Canadian North. By bridging diverse cultures and the civilian and military realms, I have argued that the Rangers represent a successful integration of national security and sovereignty agendas with community-based activities and local stewardship. The identity of Northern peoples is tied to the land, and the CAF's decision to gain their assistance in defending that land and that identity has yielded a practical partnership, rooted in traditional knowledge and skills, that promotes cooperation, communal and individual empowerment, and cross-cultural understanding. Although commentators often associate military practices, and those of the state more generally, with physical dislocation, environmental degradation,

political disruption, and culture shock for Northern Indigenous peoples,[2] the interconnectedness between the military, remote communities, and Canadian society is respected as a constructive force in the case of the Canadian Rangers. Accordingly, recent studies by myself, Kikkert, Sébastien Girard Lindsay, and Magali Vullierme argue that the Ranger organization serves as a striking example of what can be achieved when policies and practices are rooted in a spirit of accommodation, trust, and mutual respect.[3]

1.1 HISTORICAL OVERVIEW

Since 1947, the Rangers' official mission has been "to provide a military presence in sparsely settled northern, coastal and isolated areas of Canada that cannot conveniently or economically be provided for by other components of the Canadian Forces." The actual tasks that they perform in support of this mission have become more complex over time. Their initial focus was national security – protecting their communities from enemy attack in the early Cold War. By the 1970s, their responsibilities became directly linked to the armed forces' role in support of Canada's sovereignty in the Arctic. Since the 1990s, the Rangers have also played a more visible nation-building and stewardship role in remote regions across Canada. They represent an important success story for the Canadian Armed Forces as a flexible, inexpensive, and culturally inclusive means of having "boots on the ground" exercising Canadian sovereignty and conducting or supporting domestic operations.[4]

In early 1942, terrified British Columbians facing the Japanese threat in the Pacific pushed the federal government to improve its defences along the west coast. The army responded by forming the Pacific Coast Militia Rangers (PCMR), a Reserve corps modelled after the British home guard. This unconventional military force allowed British Columbian men who were too old or too young for overseas service, or engaged in essential industries such as fishing and mining, to contribute to home defence. They were expected to use their own equipment and local knowledge so that they could act as the military's eyes and ears, report any suspicious vessels or activities, and do what they could to help professional forces repel an enemy invasion.

After the war, Canada's geographical position between the United States and the Soviet Union drew new strategic interest to the Northern approaches to North America. Canada did not have the military resources to station large numbers of regular soldiers in northern and remote regions of the country, but it still needed eyes and ears in those areas. Consequently, officials resurrected the Ranger concept in 1947, this time to span all of Canada's sparsely populated coastal and northern regions. By design, the Rangers would remain in their home communities in both war and peace. Their existing local knowledge would allow them to serve as guides and scouts, report suspicious activities, and if the unthinkable came to pass, delay an enemy advance using guerrilla tactics until professional forces arrived. Rangers provided intelligence reports on strange ships and aircraft, participated in training exercises with Canada's Mobile Striking Force and other army units, and conducted search and rescue. The diverse mix of Inuit, First Nations, Métis, and Whites united in one task: "guarding a country that doesn't even know of their existence."[5] Even then, observers highlighted the ethnic diversity of the force as its primary attribute. This diversity, however, still did not extend to gender. Women, who at that time were not considered as appropriate military combatants, were not eligible to serve as Rangers – a gender barrier that remained until the early 1990s.

Annual re-supply and training visits by Regular Force Ranger Liaison Officers (RLOs) during the late 1950s and early 1960s exemplified cross-cultural contact between army representatives and Indigenous Canadians living in the North. By the 1960s, however, the Rangers factored little in Ottawa's defence plans. Northern residents with armbands and rifles could hardly fend off hostile Soviet bombers carrying nuclear weapons. Because the Rangers cost next to nothing, the organization survived – thanks only to local initiative. The "Shadow Army of the North"[6] received little to no direction from military officials, and for many their annual ammunition supplies stopped arriving by the late 1960s. Apart from Newfoundland and Labrador and a sprinkling of Northern communities, the Ranger organization was largely inactive by 1970.

The federal government renewed its interest in Arctic sovereignty in the wake of the American icebreaker *Manhattan*'s voyages in 1969-70, which Canadians believed threatened their control over the Northwest Passage. Although this new "crisis" had nothing to do with the Soviet military threat, Prime Minister Pierre Trudeau turned to the Canadian Armed Forces to assert symbolic control. His government promised increased surveillance and more Arctic training for southern troops. It created a new Northern Region Headquarters in Yellowknife responsible for the largest military region in the world, but had almost no operational units under its direct command, except the Rangers, who had been neglected for a decade and needed revitalization. Politicians and military officials in the North recommended upgrades to the Rangers, "so as to [better] use the talents and knowledge of northerners for surveillance purposes and to assist the military."[7] Limited progress was made in getting several units back on their feet. The Rangers still seemed appropriate: members were predominantly Indigenous Canadians, lived in the North and thus demonstrated Canadian occupation, could provide surveillance in their homeland at little cost, and protected sovereignty without being overly "militaristic."

Revitalizing the Rangers in the Far North also fit with a broader federal government agenda to increase Northern Indigenous participation in Canadian society. Beginning in the 1970s, the military launched initiatives to increase Northerners' representation in the armed forces. By official standards, these efforts to recruit Indigenous Northerners for the regular military failed. Few had the required education, and even fewer completed basic training. On the other hand, staff officer Ken Eyre noted, taking the best educated young people out of their communities to serve in the Forces ran against "the developing set of Inuit priorities of that period." Canadian Ranger service, however, avoided this predicament. A Northern Indigenous person remained in and served his community while at the same time serving as a Ranger.

Changes to the structure of the Ranger organization supported this new community-based focus. Northern Region replaced the conventional army company-platoon structure with localized patrols named after their communities. Patrols, rather than complicated company organizations spanning a broad area, better reflected the Arctic's demographic and geographic realities now that most Indigenous peoples lived in permanent settlements. Furthermore, the emergence of new forms of community-based leadership provided a stronger basis for Ranger activities. An effective and more representative Ranger organization in the "new North" would depend on devolving responsibility to Indigenous Canadians who could and would form a strong leadership cadre. Accordingly, the decision to empower community members to vote in their own patrol leaders rather than appointing them according to military criteria, however unorthodox from an army standpoint, proved "highly popular in small Arctic communities."[8] This leadership election process ensured that Ranger leadership was reflective of their

individual communities. This system remains in place today with decision-making within patrols reflecting local cultural and political norms.

Staff from the new Northern headquarters in Yellowknife provided basic training to Inuit and Dene Rangers in the 1970s, and these activities also proved highly popular in communities. Regular Force Ranger Instructors, typically combat arms non-commissioned officers, visited patrols across the Northwest Territories and began offering the first training, which focused on practical skills such as marksmanship, map and compass, and basic communications rather than seeking to offer comparable training to that of Regular or Primary Reserve Force soldiers. Although the promised political commitment to expand the military's Northern footprint proved more rhetorical than real, owing to an austere fiscal environment and the absence of acute military threats, the Rangers found favour in Ottawa because they visibly asserted sovereignty at little to no cost.

The Rangers' interactions with the military also contributed to greater cross-cultural awareness and the sharing of skills. Yearly or biannual Nanook Ranger exercises trained individual members to Basic Ranger Standards, and annual ammunition re-supply visits provided more sustained contact between the military establishment and the Rangers than had existed for decades. Regular Force units resumed training with Rangers in the North, learned about Indigenous cultures and survival techniques, and stressed that the Rangers taught them invaluable skills, even if they did have "a non-military way of doing things." Rangers possessed an intimate knowledge of the land borne of experience and traditional knowledge extending back generations. Accordingly, the Rangers and southern soldiers developed a sense of cohesion as members of the Canadian defence team. The Rangers did not replicate the expertise of Regular and Reserve Force units, but they supplemented it with their local and Indigenous knowledge, experience navigating the land, and cultural intelligence that allowed them to share information with southern soldiers.

Sovereignty, rather than the practical relationships on the ground, propelled further growth in the Ranger organization. When the US Coast Guard icebreaker *Polar Sea* pushed through the Northwest Passage in 1985, Canadians once again worried about sovereignty and demanded a bolder military presence in the Arctic. Brian Mulroney's Conservative government promised a host of big-ticket investments to improve Canada's control over the Arctic, from acquiring nuclear submarines to building a Polar Class icebreaker. At the same time, and on a much lower key, the Canadian Rangers drew attention as an important grassroots way to keep Canada's "true North strong and free." Until that time, defence assessments had focused on the Rangers' military utility. In a changing political climate, however, other aspects of the organization made it even more attractive. Although several Indigenous leaders called for the demilitarization of the Arctic on social and environmental grounds, they always applauded the Rangers as a positive example of Northerners contributing directly to sovereignty and security. Media coverage began to emphasize the social and political benefits of the Rangers in Indigenous, particularly Inuit, communities. Now the Rangers enjoyed tremendous appeal as an inexpensive, culturally inclusive, and visible means of demonstrating Canada's sovereignty.

Most of the government's promised investments in Arctic defence evaporated with the end of the Cold War. Conservative and Liberal governments, however, did follow through and increase the number and geographical scope of the Canadian Rangers in the 1990s – despite downsizing in the CAF more generally. Ranger patrols were re-established in the Yukon and in communities along the Mackenzie River, with most new growth directed to Indigenous communities. This reflected the importance of building and reinforcing Indigenous-military partnerships, particularly at a time when confrontations at Goose Bay, Oka, Gustafsen Lake, and Ipperwash strained relations with Indigenous peoples in southern Canada.[9] Furthermore, journalists applauded the Rangers' role in teaching the military and in encouraging elders to share their traditional knowledge with younger people in Indigenous communities. This was clear in the creation of the Junior Canadian Rangers (JCR) in 1998, which has grown to become the largest federally-sponsored youth program in Northern Canada.

The 1st Canadian Ranger Patrol Group was stood up as a unit on 2 April 1998. Captain Dwayne Lovegrove, the master of ceremonies at the stand-up parade in Yellowknife, explained that "the formation of 1 Canadian Ranger Patrol Group does more than amalgamate all Ranger patrols in the North. It creates a total force unit by transferring all members of the regular support training and administrative cadres previously assigned to Northern Area [Headquarters] into the unit as well." This created a new community – Rangers and the Ranger staff in the new 1 CRPG headquarters became part of the same unit, which soon developed its own unique identity and esprit de corps. Since April 2018, 1 CRPG comes under the command of 3rd Canadian Division located in Edmonton and is attached under operational command to Joint Task Force (North) based in Yellowknife through a Service Level Agreement. This change has had little direct effect on Rangers and JCRs, but it provides the unit with greater access to Canadian Army support structures for administration and logistics.

By the twenty-first century, Canadian Ranger patrols were found in nearly every community in Canada's three Northern territories. Popular descriptions of the Rangers have persistently emphasized their Indigenous composition and typically equated Rangers with Inuit defending their homeland. In the media, Northern voices often highlight that the most appropriate "boots on the ground" are mukluks on the tundra, planted during regular hunting activities or Ranger-led sovereignty patrols. The Rangers' established record of operations, extending back more than seven decades, affirms the interconnectedness between Indigenous and local knowledge, identities, and practices, on the one hand, and the nation's interest in exercising its sovereignty on a continuous basis, on the other.

Over the past fifteen years, the Rangers' profile has grown amidst surging interest in the Arctic related to climate change, visions of increasingly accessible natural resources and navigable polar passages, insecurities about sovereignty in the face of rising international interest, and our responsibilities as stewards of a homeland with intrinsic value to Northerners and to Canadians more generally.[10] Growing and strengthening the Rangers featured prominently in Prime Minister

Stephen Harper's plans to bolster Arctic sovereignty and enhance the safety and security of Northerners, with the Canadian Rangers reaching an average paid strength of 5000 nationally by 2013.[11] This number has been sustained since that time. Well-publicized Ranger involvement in signature "sovereignty" initiatives, such as the annual Operation NANOOK summer exercises and NUNALIVUT winter operations in the High Arctic, consolidated the Rangers' place as icons of Canada's efforts to assert sovereignty and promote security. "If Canada's Arctic sovereignty has a brand, it's the red Rangers hoodie," journalist Tim Querengesser wrote in 2010.[12] Under the Ranger hoodies, Canadians find a representative cross-section of Northern Canadian society – a visible and celebrated example of diversity in action.

1.2 ENLISTMENT AND SERVICE

To facilitate the inclusion of a diverse range of Northern Canadians, the Rangers have unique enlistment criteria. The only formal entry criteria for men and women who wish to join the Rangers stipulates that they be over eighteen years of age; Canadian citizens or permanent residents who live in a remote, coastal, or isolated area; in sufficiently good health to carry out their duties; knowledgeable of the local terrain and competent to operate on the land; and free of any legal prohibitions. There are no fitness or aptitude tests that Rangers must take prior to joining nor do they face any hard medical criteria. Given social indicators that reveal significant health and education gaps between northern and southern Canadians, these are important accommodations that allow the Ranger organization to include a more representative sample of Northern society than might otherwise be the case.

Brigadier Kelly Woiden, the chief of staff, Army Reserve, told the House of Commons Standing Committee on National Defence on 18 February 2015 that, "more than anything else, [Rangers] have a very clear and strong understanding of local community and their environment. Many of them are individuals who have prominence. They can be an elder within the native community with their local Inuit or other … First Nations peoples across the country. However, they could also just be rank-and-file folk because of their background and knowledge, for instance, the local snowmobile mechanic who has done well and he's the best guy."[13]

Ranger enrolment criteria also respect the local and Indigenous knowledge and practical experience operating in their homelands that recruits bring to the organization. Upon enrolment, Canadian Rangers are considered "trained, self-sufficient, equipped, and clothed to operate as self-sufficient mobile forces in support of CAF sovereignty and domestic operations in Canada in their local area of responsibility (AOR)." This AOR is generally described as a 150-km radius around their home communities.[14] Many new Rangers have the opportunity to take a ten-day orientation course, provided by Regular or Primary Reserve Force Ranger Instructors, which focuses primarily on marksmanship and learning basic facts about the history and structure of the CAF. There is no "basic training" akin to the Regular Force or Primary Reserves, however, and Rangers are not required to undertake annual training. Accordingly, Rangers do not conform to the principle of universality of service because knowledge of the military and conventional "soldiering skills" are not prerequisites to their participation. Their role is not to serve as combat forces, but rather to serve as enablers for other elements of the defence team in a warfighting scenario. This precludes the need to incorporate them into more typical modes of military culture and training, an important consideration given the sensitivities around a long history of state-led assimilationist agendas seeking to eradicate Indigenous cultures and recast Indigenous people into Euro-Canadian molds.[15]

The organization is also unique in the CAF in that there is no compulsory retirement age for Rangers. Instead, a Ranger is only considered non-effective when they can no longer patrol their AOR in the process of their individual normal routine; they do not reflect good credit upon their community, their patrol, and the CAF; they are not accepted as an equal and participating member within their respective patrol; or they no longer provide tangible advice and guidance to the patrol which is grounded in experientially-based knowledge. If the patrol membership decides by consensus that the individual is non-effective, then the commanding officer

of the patrol group can release the Ranger.[16] This process not only reinforces the community-based philosophy of the organization, it also reflects a deep-seated respect for the role of elders in Indigenous communities.

As long as individual Rangers contribute positively to their patrol, in the eyes of the other patrol members, they can remain in the organization regardless of age. For example, people unable to travel on the land can serve as communication contacts back in the community (thus promoting inclusion of persons with disabilities). Elders also serve as important cultural mentors and subject matter experts, lending traditional and local knowledge to the planning of operations, management of relationships within a patrol, the training of other Rangers, and the mentoring of youth. Accordingly, the absence of a compulsory retirement age brings greater generational diversity[17] within the Rangers (see appendix F) than in the Regular and Primary Reserve Forces, and it also facilitates the trans-generational transfer of knowledge within Northern communities.

The diverse landscapes in which Rangers live and operate also prescribe different equipment and clothing needs. The philosophy of treating the Rangers as "self-sufficient, lightly-equipped" members of the defence team recognizes this reality as well as the military's limited capabilities for providing logistical support and sustenance to community-based patrols distributed across the Territorial North. The Rangers are known for their much-publicized "red hoodies," and are also provided with t-shirts, ball caps, CADPAT pants, military boots, and red jackets intended for parade. On operations, however, Rangers are expected to use their own environmentally-appropriate clothing, which they deem best suited to local conditions, rather than being assigned standard military gear. While media commentators sometimes dismiss the Rangers as "rag-tag forces" as a result, these commentators fail to observe that this lack of uniformity embodies a respect for diversity, allowing Rangers to make their own decisions about what they should wear to operate comfortably and effectively in their home environments. This same logic extends to transportation and camping equipment. During training and official taskings, Rangers are paid for the use of their own equipment and vehicles such as snowmachines, all-terrain vehicles, and boats according to an established Equipment Usage Rate (EUR). This arrangement provides Rangers with some tax-free reimbursements that they can invest in their own equipment and tools, appropriate to their local environment, which they are free to use in their everyday lives without having to ask the government for permission to do so. By encouraging individuals to use their own, privately-owned equipment, this approach represents a material contribution to local capacity-building. All of these considerations are discussed in more detail later in this report.

1.3 DIVERSITY AS A FORCE MULTIPLIER

Canada's Northern territories are a diverse human geography, with Indigenous peoples comprising a substantial portion of the

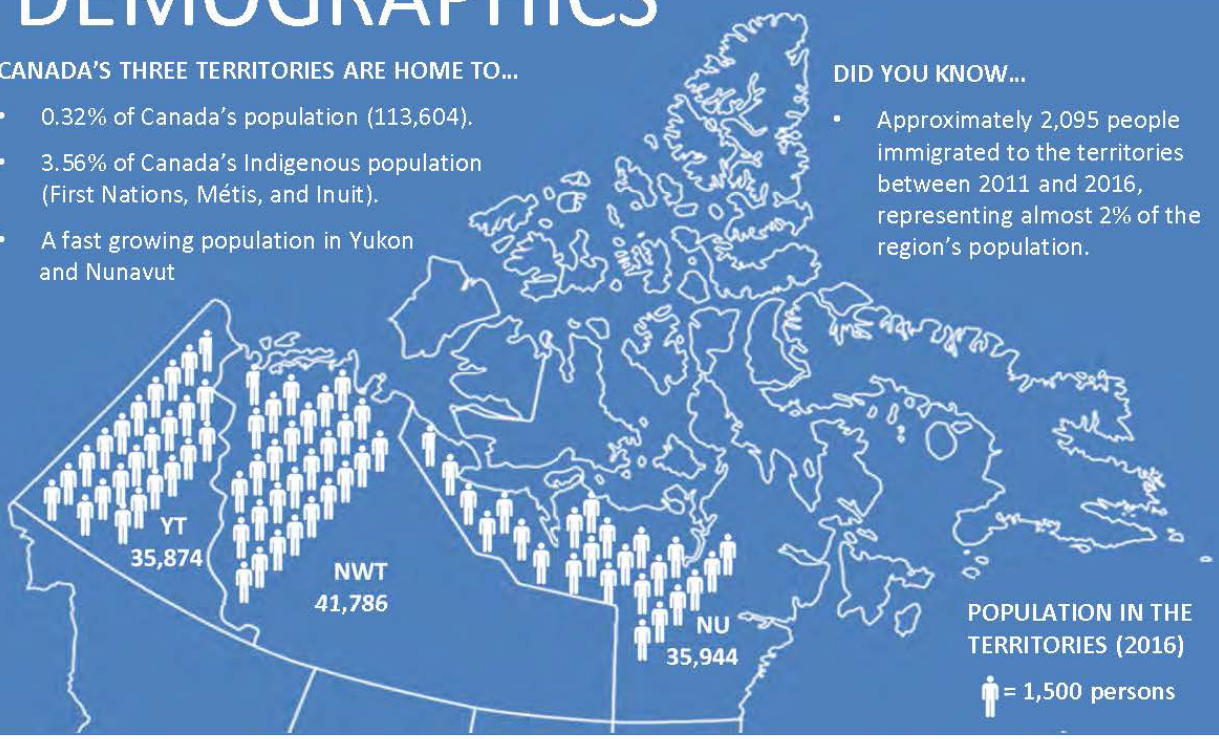
DEMOGRAPHICS

CANADA'S THREE TERRITORIES ARE HOME TO...

- 0.32% of Canada's population (113,604).
- 3.56% of Canada's Indigenous population (First Nations, Métis, and Inuit).
- A fast growing population in Yukon and Nunavut

DID YOU KNOW...

- Approximately 2,095 people immigrated to the territories between 2011 and 2016, representing almost 2% of the region's population.



COMMUNITY GROWTH RATES (2011-2016)

- Whitehorse , YT– 7.8%
- Fort Smith, NWT – 25.3%
- Hay River, NWT – -2.6%
- Inuvik, NWT – -6.5%
- Yellowknife, NWT – 1.1%
- Arviat, NU – 38.9%
- Baker Lake, NU – 10.0%
- Cambridge Bay, NU – 11.5%
- Gjoa Haven, NU – -1.4%
- Iqaluit, NU – 10.3%
- Kugluktuk, NU – 1.0%
- Rankin Inlet, NU – 28.1%

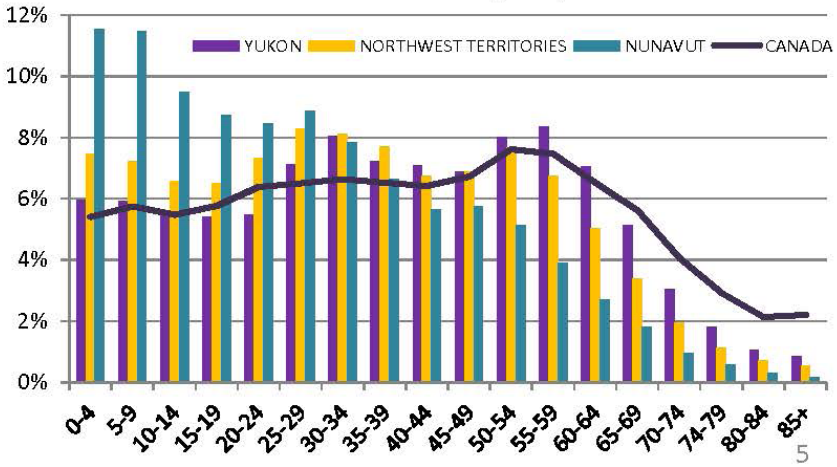
WANT TO KNOW MORE?

- Statistics Canada: Canada at a Glance 2018

CHALLENGES AND OPPORTUNITIES

- All territories have a younger population than Canada as a whole; over 60% of the population is under the age of 40.
- The average age of the Indigenous population ranges between 2 and 5 years younger than for the non-Indigenous population.
- The territorial population is spread across more than 3.4 million square kilometers, which includes many remote communities.

PERCENTAGE OF THE POPULATION BY AGE (2016)



Source: Statistics Canada, Census 2016

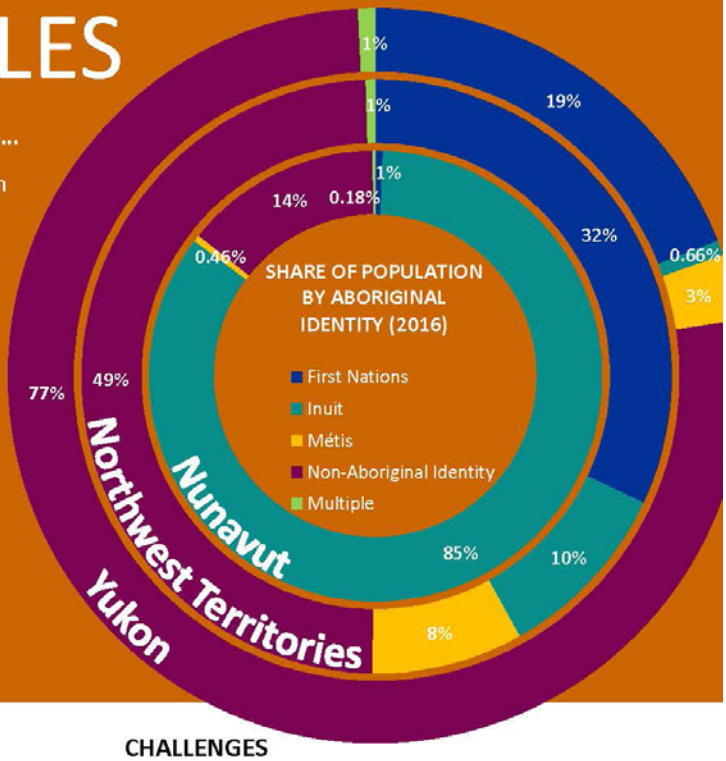
INUIT, FIRST NATIONS, AND MÉTIS PEOPLES

CANADA'S THREE TERRITORIES ARE HOME TO...

- More than half of Canada's Inuit population (53%).
- A high proportion of Indigenous peoples, 53.3% of the population in the territories identified as Indigenous in 2016, versus 4.9% in Canada at large.

DID YOU KNOW...

- The 2011 National Household Survey identified that 2% of the Indigenous population aged 15 and over in the territories were self-employed.



LANDSCAPE

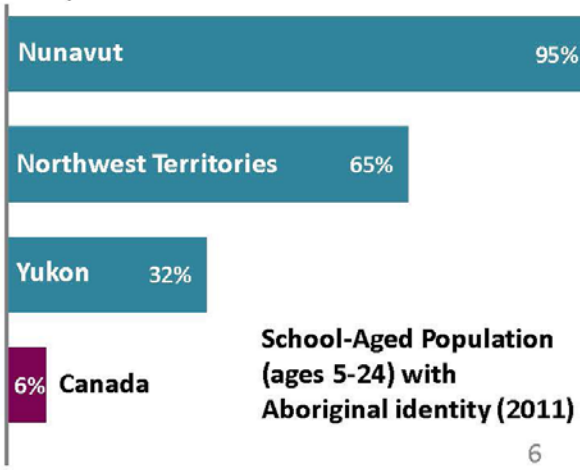
- The Nunavut population is comprised of 86% Indigenous persons, compared to 51% in Northwest Territories and 23% in Yukon.
- The territorial Indigenous population includes more than 20,000 First Nation, 4,500 Métis, and 34,400 Inuit.
- 88% of the Inuit population in Canada's territories is located in Nunavut.

WANT TO KNOW MORE?

- National Aboriginal Economic Development Board: Reconciliation: Growing Canada's Economy by $27.7 Billion
- National Aboriginal Economic Development Board: Investing in Canada's Future Prosperity: An Economic Opportunity for Canadian Industries
- TD Economics: The Long and Winding Road Towards Aboriginal Economic Prosperity
- Canadian Council for Aboriginal Business: Promise and Prosperity: the 2016 Aboriginal Business Survey

CHALLENGES AND OPPORTUNITIES

- The territories have some of the highest unemployment rates for Indigenous persons in Canada.
- The traditional knowledge and practices of Indigenous Peoples are globally recognized as vital to sustainable development and climate change adaptation in the North.



Sources: Statistics Canada; Canadian Council for Aboriginal Businesses

population. Combined, Canada's three territories were home to just over 113,600 people in 2016, representing 0.3% of the total Canadian population. Outside of the territorial capitals, most residents live in small, dispersed communities, many without road access, with concomitant challenges of economies of scale and the delivery of government services. Whereas Indigenous people — First Nations, Inuit, and Métis — made up 4.3% of the total Canadian population in the 2011 census, they comprised 23.1% of the population in Yukon, 51.9% in the Northwest Territories, and 86.3% in Nunavut.

Part of the Rangers' perceived success as a Northern Canadian organization is that the patrols are reflective of the ethnic composition of their communities. Although the Canadian Army's unreliable Ranger self-identification data for 1 CRPG does not yield credible official statistics, conversations with Ranger Instructors and headquarters personnel, as well as my field work over the past twenty years, affirm that more than two-thirds of all Canadian Rangers across the Territorial North are of Indigenous descent. The rates of Indigenous participation are highest in Nunavut and the NWT, with Yukon having higher numbers of non-Indigenous members, as broader demography would predict. We discuss Indigenous participation rates in more detail in chapter 6.

At the local level, individual patrols are generally representative of their communities' ethno-cultural and linguistic diversity. These are important considerations, given the Government of Canada's strong focus on the centrality of Northern Indigenous leadership and the defence policy statement that "Indigenous communities are at the heart of Canada's North" and the military will "work to expand and deepen our extensive relationships with these communities, particularly through the Canadian Rangers and Junior Canadian Rangers."[18]

A closer look at official statistics also serves to illustrate how partial or omitted data influences and even distorts our understanding of the Rangers and diversity in the CAF more generally. In a presentation to the Chief of Staff Army Reserves in Yellowknife in January 2018, I demonstrated how Indigenous participation rates derived from CAF self-identification surveys dramatically under-represent both the percentages and actual numbers of Indigenous people in the Rangers and, by extension, in the CAF as a whole. Official statistics released in May 2016 suggest that "based on self-identification figures from June 2015, there are approximately 2294 Aboriginal members currently serving in the CAF Regular Force and Primary Reserve Force combined, or a representation of 2.5 per cent…. The CAF's long-term Employment Equity goal for Aboriginal peoples is 3.4 per cent." For an undisclosed reason, the Rangers were quietly left out of this calculation. When I compared the Army's Canadian Ranger cultural self-identification statistics to the 1 CRPG nominal roll, I found a huge discrepancy in Indigenous

CANADIAN RANGERS NATIONAL TASK LIST

The Canadian Rangers are assigned three tasks ("on duty when authorized by their CRPG HQ") in the Departmental Administrative Orders and Directives (DAOD) 2020-2 Canadian Rangers:

Tasks	Examples
Conduct and provide support to sovereignty operations	• Conduct and provide support to surveillance and sovereignty patrols, including training in Canada. • Conduct North Warning System site patrols. • Report suspicious and unusual activities. • Collect local information of military significance.
Conduct and provide assistance to CAF domestic operations	• Conduct surveillance of Canadian territory. • Provide local knowledge and Canadian Ranger (CR) expertise (i.e. advice and guides). • Participate in search and rescue operations. • Provide support in response to natural or man-made disasters and support in humanitarian operations. • Provide assistance to federal, provincial, territorial, or municipal government authorities.
Maintain a CAF presence in the local community	• Instruct, mentor, and supervise Junior Canadian Rangers. • Participate in and support events in the local community (e.g. Yukon Quest, Canada Day, Remembrance Day, etc.).

representation being reported: 19.8% through self-identification rather than a 78.9% Indigenous participation rate based on my rough calculation. The statistics that I generated indicated that, if Rangers are included in the CAF calculations, Indigenous people may already represent up to 5% of the CAF membership – thus already exceeding the CAF's goal of 3.4% Indigenous representation.

By more fully embracing the Rangers as members of the defence team, this example illustrates how more systematic data collection and analysis can help to challenge base assumptions and recast accepted narratives that are grounded in incomplete or erroneous evidence. A more systematic diversity assessment can help to strengthen and enhance success, identify potential barriers that may be preventing some people from participating more fully or equally within the organization, as well as open opportunities to increase diversity and ensure more equitable opportunity within the Rangers.

"Climate change, combined with advancements in technology, is leading to an increasingly accessible Arctic. …Over time, this interest is expected to generate a corresponding rise in commercial interest, research and tourism in and around Canada's northern territory. This rise in activity will also bring increased safety and security demands related to search and rescue and natural or man-made disasters to which Canada must be ready to respond."

Strong, Secure, Engaged, 51.

The high rates of female participation in the Canadian Rangers and JCR also warrant attention and more sophisticated analysis. According to 2017 statistics released by the CAF, women comprise 15.1% of the Regular Force and Primary Reserve. By contrast, 21% of the Canadian Rangers were women as of July 2016 – a number that is close to the *SSE* target of 25% women. As of December 2016, there were 408 female Rangers in 1 CRPG, representing 22.7% of the unit strength – a much higher percentage than in the Regular Force or Primary Reserves.[19] As discussed in chapter 3, these statistics affirm that women feel that they can and should play a leadership role in the Rangers, as well as their acceptance by their peers (who elect them into these positions).

1.4 INCLUSION IN PRACTICE

In previous writings, I have argued that the Rangers have proven their value in recent decades by striking an appropriate balance between their military and community contributions.[20] The combat role originally assigned to Rangers in 1947 has been removed from their official task list because they are neither trained nor equipped for this role, leading some commentators to declare that they are not a "real military force" and citing this as a prime example of how the CAF is unprepared to defend Canada's Arctic from foreign adversaries.[21] This logic is problematic on several levels, revealing a profound misunderstanding of both the Rangers and how they fit within the defence team.

The Rangers' national task list encompasses three broad aspects: conducting and supporting surveillance and presence patrols; conducting and assisting with domestic military operations; and maintaining a Canadian Armed Forces presence in local communities. This includes reporting unusual activities or sightings; collecting local data for the CAF; land-based and maritime patrolling — in winter by snow machine and in summer by boats; training and guiding Regular and Primary Reserve Force units operating in remote regions; assisting in search and rescue efforts and in local emergencies; and assisting with natural disasters such as forest fires and floods.[22] The Army considers the Rangers "a mature capability" and "the foundation of the [CAF's] operational capability across the North for a range of domestic missions."[23] In emphasizing their myriad contributions, the Army notes that the "Rangers will remain a critical and enduring presence on the ground, valuable in many roles, including amongst others, the CAF's eyes and ears for routine surveillance purposes, its guides, local cultural advisors, interpreters, and the core of our liaison capacity in many locations, while remaining immediately available to support local government or other agencies."[24]

The key Arctic defence documents produced by the Canadian military over the last decade all emphasize integrated defence team and whole of government approaches to meet challenges across the mission spectrum (see chapter 2).[25] Within these concepts, the Rangers are situated as facilitators or enablers for other military

components providing combined response capabilities (see chapter 3).

The Rangers also provide an important outlet for Northern Canadians who wish to serve in the defence of their country without having to leave their communities. Their familiarity with local cultures and vested interest in the welfare of their fellow community members make them valuable, trusted assets. We develop these themes more fully in chapters 4 and 5 on community disaster resilience and community resilience more generally. Chapter 6 on Indigenous resilience highlights how Ranger activities allow members of Indigenous communities to practice and share traditional skills, such as living off the land, not only with people from outside their cultures but also across generations within. These skills are central to Indigenous identities, and there is a persistent worry that these will be lost unless individuals have opportunities to exercise them and share them with younger generations. By celebrating traditional and local knowledge and skills, as well as encouraging and enabling community members to go out on the land and share their knowledge and expertise, the Rangers can play an important role in supporting the retention or expansion of core cultural competencies (see chapter 6). In turn, the Ranger concept is inherently rooted in the idea that the unique knowledge of Canadians living in isolated Northern and coastal communities can make an important contribution to effective military operations. It is this partnership, rooted in mutual learning and sharing, that has made the Rangers a long-term success on the local and national levels. It also reflects the achievement of inclusion, building on an appreciation of Northern Canadian diversity.

FRAMING THE STUDY: SELECTED POLICY AND OPERATIONAL DOCUMENTS

P. WHITNEY LACKENBAUER

This chapter frames our study on Canadian Ranger success metrics by undertaking a systematic analysis of some core Canadian Armed Forces (CAF) documents related to Arctic strategy and operations from 2010-19, highlighting ideas or sections that have a direct or significant indirect bearing on the Canadian Rangers. It also provides an overview of key elements in Canada's 2017 defence policy, *Strong, Secure, Engaged* (*SSE*), Prime Minister Justin Trudeau's ministerial mandate letters in 2015 and 2019, and the Arctic and Northern Policy Framework (2019) that frame expectations for the Rangers, Arctic defence and security, and the Government of Canada's priorities for the Arctic and North more generally.

2.1 ARCTIC SOVEREIGNTY AND SECURITY: GENERAL CONCEPTS

The traditional view of Canadian Arctic sovereignty and security focuses on military defence, especially the protection of national borders and the assertion of state sovereignty over Arctic lands and waters. During the Cold War, Arctic security was inseparable from national security, nuclear deterrence, and the bipolar rivalry between the American and Soviet superpowers.[1] Alternative understandings of security that emphasize economic, social, cultural, and environmental concerns have emerged in the post-Cold War period, leading many scholars and policy-makers to now promote a broader and deeper conception of security that reflects new and distinct types of threats (and encompasses human and environmental security).[2] This understanding frames Canada's "Whole-of-Government" or "Whole-of-Society" approach to Arctic security which involves many departments and agencies (at various levels of government) and Northern community stakeholders.[3] While overshadowed by popular depictions of circumpolar competition and a so-called Arctic "arms race" in popular media coverage, the Government of Canada's integrated, comprehensive approach to defence and security reflects an increasingly concerted effort to reduce risks across the mission spectrum and strengthen the resilience of Arctic communities. DND/CAF policy and

operational documents have emphasized this framework for more than a decade, which offers a strong and appropriate basis upon which to build capabilities to defend the Canadian North proportionate to the threat environment.[4] The Rangers have thrived within this context.

A recent shift in emphasis towards the return of major power competition globally also affects Arctic security both directly and indirectly. First and foremost, a growing Russian military presence in their Arctic, coupled with speculation about China's strategic activities in the region, warrant careful monitoring and analysis in concert with our "premier partner" (the United States) and other NATO allies. Changes to the global threat environment, however, have not changed the perception of the conventional military threat to or in the *Canadian* Arctic. Although meeting major power competitor threats globally requires new or renewed capabilities that will be deployed in the Canadian Arctic (such as interceptor aircraft to replace the CF-18 and post-North Warning System layered detection systems), these requirements are not borne of threats emanating from Arctic-specific sovereignty issues or disputes. There is a salient distinction between threats ***to*** and ***in*** the Canadian Arctic and potential adversaries' delivery systems that may strike at the continental heartland after passing ***through*** the Canadian Arctic. For example, Russian military activities in its Arctic do not relate, in any obvious way, to environmental change or maritime corridors in the Canadian Arctic. By contrast, the Canadian Rangers are designed to focus on threats to and in the domestic Arctic, the most acute of which (at least in the near-term) are not associated with foreign military activities. Accordingly, assigning and assessing Ranger tasks should take into account the important distinction between *Arctic issues* emerging in and from the Arctic region with *strategic international threats* that may have an Arctic dimension but are more appropriately dealt with at a global level.

Northern Indigenous peoples also offer strong views on sovereignty and security through the lens of peoples with rights as members of Arctic states and as Indigenous peoples.[5] While Inuit leaders have typically adopted stances against "militarization" of the Arctic,[6] they have also applauded the roles of the Canadian Rangers and economic and capacity-building benefits associated with some defence projects in Inuit Nunangat (the Inuit homeland).[7] The core overarching message is encapsulated in the phrase that "sovereignty begins at home,"[8] and that Inuit are empowered (including being provided with sufficient resources) to protect their lands and their rights in the spirit of self-determination. The Inuit Tapiriit Kanatami (ITK) chapter to

the *Arctic and Northern Policy Framework (ANPF)* insists that "all governments must understand that Inuit use and occupy Inuit Nunangat – our homeland 12 months of the year, that Inuit are the stewards of the land, and given appropriate infrastructure, will continue as the principal players and first responders in Canada's Arctic sovereignty and security."[9] Activities pursuant to the 2017 Inuit Nunangat Declaration on Inuit-Crown Partnership recognize Indigenous rights and co-decision-making authority over Arctic lands and waters as essential preconditions to reconciliation, and prioritize the "full and fair implementation of the obligations and objectives of Inuit land claims agreements as foundational for creating prosperity among Inuit which benefits all Canadians." Inuit also assert their rights as a transnational people, and the Inuit Circumpolar Council's 2018 Utqiaġvik Declaration mandates the organization "to initiate diplomatic talks for the purpose of laying the groundwork for negotiations to declare the Arctic as a Peaceful Zone." There is no indication that this precludes support for a defence presence in the region, in forms like the Canadian Rangers, that draws upon Indigenous knowledge, supports Indigenous communities, and does not threaten to escalate regional or global threat levels.

2.2 THE NORTHERN THREAT ENVIRONMENT AND THE CAF ARCTIC OPERATIONAL PICTURE[10]

Concept documents produced by DND/CAF since 2010 have consistently emphasized that Canada does not face any imminent conventional military threats *to* its Arctic. "As a result of the effects of climate change, combined with advancements in technology, the Canadian Arctic is becoming increasingly accessible," the Chief of the Defence Staff (CDS) explained in a 2018 document. "Growing interest in the economic and strategic potential of the Arctic necessitates increased [Government of Canada] surveillance and presence throughout the region." This document also reiterates the long-standing appraisal that "there is currently no imminent military threat to Canada's security in the North," but adds the important caveat that "the security environment will continue to evolve as a result of both climate change and the actions of other international players including Arctic and non-Arctic states." This acknowledges that new risks and threats may emerge, which means that the CAF must have the capability to project and sustain forces to deal with situations that fall across the entire spectrum of operations [figure 2.2]. While noting enduring responsibilities to defend Canada and North America and deter would-be aggressors, as well as the need to monitor military activities across the Arctic region, strategic documents emphasize that the defence and security risks and threats facing Canada's Arctic are unconventional, with the lead management responsibilities falling primarily to other

> ***"THE CAF ACKNOWLEDGES THE IMPORTANCE AND UNIQUE NATURE OF THE CANADIAN ARCTIC BY CONSIDERING IT A THEATRE OF OPERATIONS."***
>
> Chief of the Defence Staff (CDS), *CDS Initiating Directive for the Development of the CAF Arctic Campaign Plan*, 11 August 2018

SAFETY	SECURITY	DEFENCE
	GOVERNMENT LEAD	
EMERGENCY MEASURES ORGANIZATION	LAW ENFORCEMENT AGENCIES	CANADIAN ARMED FORCES
Safety is defined as the actions taken to protect life and limb or to mitigate damages to critical infrastructure and government assets from ***force majeure*** events	Security is defined as the precautions taken to guard against crime, attack, sabotage, or espionage actions by criminal or non-state actors	Defence is defined as military actions taken to deter and defeat enemy state actors to protect Canada's North

FIGURE 2.2: Spectrum of Operations

government departments and agencies.[11] A recent plan also emphasizes that:

> the preponderance of CAF activities must consider the safety and security threats that stakeholders living and working in the [Canadian North] face every day. These activities must drive the CAF to build and possess the right balance of dual-purpose infrastructure and defence presence needed in order to deter and defeat threats that may use the Northern approaches to threaten North America while also enabling the conduct of safety and security missions.[12]

Accordingly, Arctic plans anticipate that the CAF is likely to play an increasingly active domestic role in support of civilian authorities in the Canadian Arctic. Strategic and operational-level documents guiding the military's Northern planning focus on Whole-of-Government or Whole-of-Society responses to law enforcement challenges (such as upholding Canadian fishing regulations vis-à-vis foreign fishing fleets), environmental threats (such as earthquakes and floods), terrorism, organized crime, foreign (state or non-state) intelligence gathering and counterintelligence operations, attacks on critical infrastructure, and pandemics.[13] From a military perspective, this means supporting the many stakeholders responsible for implementing federal, territorial/provincial, local, and Indigenous government policies in the North.

To fulfill the military's roles in leading or assisting in the response to security incidents, DND/CAF officials recognize the need to build strong, collaborative relationships with Northern partners. Policy and planning documents clearly highlight threats to Indigenous communities posed by climate change, economic development, and increased shipping activity. Furthermore, these documents consistently emphasize that Northern domestic partners must be involved in the planning and enactment of policies and activities in the region, with information shared across government departments and with Arctic stakeholders. Because of the military's training, material assets, discretional spending powers, and the specialized skill set held by its personnel, the CAF recognizes its essential role to assist its Whole-of-Government partners in delivering their mandates in Canada's North – albeit in an explicitly supporting role.[14] In short, while other departments and agencies are mandated to lead the responses to most disasters and emergencies, the military will "lead from behind" in many or most of these safety and security scenarios. The exception is search and rescue (SAR), where DND has the lead for coordinating air and maritime SAR and providing aeronautical SAR – but plays a supporting role in Ground SAR (GSAR).

Arctic plans also commit to enhance and expand the CAF's persistent presence in the Canadian Arctic. Being "strong at home" requires domain and situational awareness through increased surveillance and monitoring, better information sharing with partners and allies, and more integrated land, air, and maritime capabilities to project force in the region. The rebranding of Operation NANOOK (the CAF signature operation delivering Arctic training, developing partnerships, and improving readiness) in 2018 to consolidate various operations and exercises under one operational banner

reflecting year-round activities better reflects an integrated approach with key allies and partners. In concert with Operation LIMPID, it also provides constant monitoring of Canada's approaches. This logic also explains the current focus on enhancing surveillance and control of aerospace and maritime approaches to North America, as well as Canadian sovereignty, territory, waters, and airspace in its Arctic, through an integrated, layered system-of-systems. In this model, the Canadian Rangers represent one of several elements (also including Arctic and Offshore Patrol Vessels, the Nanisivik refuelling facility, the Canadian Coast Guard, fixed- and rotary-wing overflights) that contribute to all-domain situational awareness in this priority area.[15] Flowing from these capabilities, the CAF also plays an important role in reinforcing public confidence that the Government of Canada is trained, equipped, and ready to serve the interests and needs of Canadians in the region.

The CDS 2018 initiating directive for the Arctic Campaign Plan also emphasizes that "the CAF presence shall not unnecessarily burden local communities, whose resources may be limited."[16] This consideration applies to the Rangers, and should inform what the CAF and, more broadly, what Canadians can reasonably expect from a Ranger patrol. Furthermore, resource limitations also constrain what Rangers and their home communities should expect from DND/CAF. On the other hand, while military documents identify limited community-based resources in the North as a "restraint," the Defence Team should also embrace a more creative, proactive outlook that conceptualizes how an expanded CAF presence can bring enduring, positive effects on local communities consistent with the department's mandate. The Canadian Rangers represent an important opportunity to do so.

Metric of Success: 1 CRPG enjoys strong relationships with other federal departments and agencies, territorial governments (particularly through emergency measures organizations), and Indigenous governments and organizations.

Metric of Success: At the patrol level, Canadian Rangers have strong relationships with the local hamlet or First Nation government(s), Royal Canadian Mounted Police (RCMP) detachment, volunteer Ground SAR organization, Canadian Coast Guard Auxiliary, Territorial emergency measures organizations, and/or other relevant stakeholders.

2.3 NORTHERN APPROACHES: THE CANADIAN ARMY IN THE ARCTIC

The Canadian Army has a responsibility to be prepared to defend Canada in case of attack. Developing capabilities to conduct warfighting in the Arctic, given the vastness of the territory, environmental constraints, and the size of the human population resident in the region, cannot simply involve extending those capabilities already resident within the Canadian Army to Canada's Northern Territories. To do so would involve substantial investments that would divert limited resources away from the Army's ability to meet challenges and project Canadian interests elsewhere in the world. Given the many assessments emphasizing that Canada faces no

"THE ARCTIC REGION REPRESENTS AN IMPORTANT INTERNATIONAL CROSSROADS WHERE ISSUES OF CLIMATE CHANGE, INTERNATIONAL TRADE, AND GLOBAL SECURITY MEET."

Strong, Secure, Engaged (2017) 50

short-term conventional military threat to Canada's sovereign territory in the Arctic, scenarios in which the Canadian Army might be called upon to apply kinetic effects in the Canadian Arctic are conspicuously absent from all operational planning documents. Accordingly, the Canadian Army has focused its efforts on preparing for safety and security operations in the Canadian Arctic and engaging with local populations to maintain a presence in the region.

In *Northern Approaches: The Army Arctic Concept 2021* (published in 2013),[17] the Commander of the Canadian Army identified eight elements upon which to focus capability development:

- Expansion and modernization of the Canadian Rangers (CR). This effort is ongoing (and many aspects are still being defined) in 1 CRPG and the other CRPGs across Canada.
- Establishment of a CAF Arctic Training Centre (CAFATC) at Resolute Bay, Nunavut. This training facility provides a venue for the Land Force to develop Arctic operational skills, often with Canadian Ranger support to deployed elements as guides, survival instructors, and subject matter experts on High Arctic operations.
- Establishment of four Primary Reserve (PRes) Arctic Response Company Groups (ARCGs) based in southern Canada. Rangers provide regular support to these units when they deploy to the Canadian North, as well as advanced training in the south when requested to do so.
- A Primary Reserve Company (C Company of the Loyal Edmonton Regiment) has been established in Yellowknife. Rangers have provided support to the unit, such as Michael Camille and Charlie Quitte from Behchokò who shared practical knowledge with soldiers on how to build improvised shelters (such as a lean-to out of pine branches and a quinzhee) and the basics of snaring rabbits with wire during Exercise Wolverine Blizzard 19.[18]
- Development of short-notice Arctic capabilities, in sub-unit strengths.
- Revitalization of Arctic training and equipment for the Regular Force and Primary Reserves.
- Enhancement of existing Canadian Army

command elements for employment in the domestic Arctic.
- Development of a robust national capacity to sustain unscheduled deployments throughout the domestic Arctic.

While emerging trends in the economic and military spheres will continue to shape the Circumpolar Arctic as a zone of competition (and particularly as an area of approach), and the Canadian Arctic is not immune to potential "spill-over effects" and "grey zone" tactics that could seek to undermine stability, there is little likelihood that this requires a dramatic increase in combat-capable Canadian Army Arctic forces for domestic missions.

The Rangers, as a sub-component of the Canadian Army Reserve, obviously fall within this overall concept. Given that most other CAF elements are primarily based in southern Canada (and have the ability to project into the North through "expeditionary operations" as required), the Rangers provide an essential, persistent presence in isolated communities. In emphasizing their myriad contributions, the Army notes that the Rangers "remain a critical and enduring presence on the ground, valuable in many roles, including amongst others, the CAF's eyes and ears for routine surveillance purposes, its guides, local cultural advisors, interpreters, and the core of our liaison capacity in many locations, while remaining immediately available to support local government or other agencies."[19] Given the challenges of mobility, sustainment, survivability/ functionality, and communications in remote regions, the Canadian Army highlights the value of lightly-equipped, self-sufficient, community-based Reservists who are attuned to their local physical and human environments. Since 2009, the Army has described the Canadian Rangers as "a mature capability" and "the foundation of the [Canadian Armed Forces'] operational capability across the North for a range of domestic missions."[20]

Metric of Success: Observations from Ranger activities feed into the Canadian Army Lessons Learned Process, particularly on the sustainment and conduct of domestic and sovereignty operations.[21]

2.4 FEDERAL MINISTERS' MANDATE LETTERS (2015 AND 2019) AND *STRONG, SECURE, ENGAGED* (2017)

The ministerial mandate letters released by the Trudeau Government in 2015 and 2019 promise to enhance nation-to-nation relationships with Indigenous peoples in the North, and Ottawa has committed to "work with territorial governments and Indigenous communities to ensure the North achieves its full potential both in terms of resource development and community capacity building." The 2015 letter instructed Minister Harjit Sajjan to "renew Canada's focus on surveillance and control of Canadian territory and approaches, particularly our Arctic regions, and increase the size of the Canadian Rangers." While the specific reference to the Canadian Rangers in the letter indicated positive support for the organization and political will to enhance it, the directive to "increase the size" attracted significant feedback at various levels in 1 CRPG (see section 3.8 for further discussion). In 2016, the Commanding Officer of 1 CRPG communicated that ongoing government efforts to expand the JCR program had already overwhelmed the unit's capacity to manage numerical growth effectively, leaving it unable to meet its mandate. He cautioned that additional political pressure to expand the number of Rangers in 1 CRPG would have the unintended effect of degrading the unit's ability to deliver on its mission. Accordingly, he advised Army Headquarters that the Canadian Rangers should focus on an *expansion of capability (including an increase in the number of Ranger Instructors and other staff to support the Rangers) rather than expanding the number of Rangers.*

Canada's defence policy *Strong, Secure, Engaged,* released in June 2017, reinforced that the Arctic remains an area of political and strategic interest and focus. Climate change, resource issues, undefined continental shelf boundaries, potential maritime transportation routes, and security concerns have factored significantly into the domestic and foreign policy agendas of Arctic states, non-Arctic states, and organizations. "To succeed in an unpredictable and complex security environment," the new defence policy committed to "increase [its] presence in the Arctic over the long-term and work cooperatively with Arctic partners,"[22] reiterating longstanding

images of the Arctic as a region undergoing massive change. At the same time, it explains that "Arctic states have long cooperated on economic, environmental, and safety issues, particularly through the Arctic Council, the premier body for cooperation in the region," and that "all Arctic states have an enduring interest in continuing this productive collaboration."[23] While *SSE* highlights Russian force projection from their Arctic region into the North Atlantic as a threat, it does not indicate a Russian conventional military threat to the Canadian Arctic.[24]

SSE directs that the CAF improve its mobility and reach in Canada's "northernmost territories" and establish "a greater presence in the Arctic, recognizing that Canada's defence partnership with the US remains integral to continental security." Accordingly, *SSE* provides clear direction to enhance "the mobility, reach, and footprint of the CAF in Canada's North to support operations, exercises, and the CAF's ability to project force into the region; and conducting joint exercises with Arctic allies and partners, and supporting the strengthening of situational awareness and information-sharing in the Arctic, including with NATO." On a domestic level, the policy observes that, "while operating in Canada's North, we often work in close partnership with other federal, territorial, and local partners. As such, we will leverage our new capabilities to help build the capacity of whole-of-government partners to help them deliver their mandates in Canada's North, and support broader Government of Canada priorities in the Arctic region." The end state is for DND/CAF to become "established as an Arctic defence and security expert and a key capability building partner through enhanced presence, interoperability and readiness."[25]

SSE Arctic Initiatives:

SSE 43. Acquire all-terrain vehicles, snowmobiles and larger tracked semi-amphibious utility vehicles optimized for use in the Arctic environment.

SSE 106. Enhance the mobility, reach and footprint of the Canadian Armed Forces in Canada's North to support operations, exercises, and the Canadian Armed Forces' ability to project force into the region.

SSE 107. Align the Canadian Air Defence Identification Zone (CADIZ) with our sovereign airspace.

SSE 108. Enhance and expand the training and effectiveness of the Canadian Rangers to improve their functional capabilities within the Canadian Armed Forces.

SSE 109. Collaborate with the United States on the development of new technologies to improve Arctic surveillance and control, including the renewal of the North Warning System.

SSE 110. Conduct joint exercises with Arctic allies and partners and support the strengthening of situational awareness and information sharing in the Arctic, including with NATO.

The public consultations that preceded the defence white paper reveal various perspectives on the CAF's role in the North. "There was substantial discussion of the success of the Rangers, as well as how they should be maintained and possibly expanded, or utilized differently," a summary report noted. "Some suggested a maritime component while others called for reinforcing the existing ranks and fully implementing plans that are already in place." (I was a strong advocate for the latter during the Yellowknife consultation session.) Everyone engaged in the public consultations affirmed that Rangers "play [an] important role in forging ties with the local communities and represent the leadership of the communities." Specific responsibilities included domain awareness, for which the Rangers need to be "well trained and well supported." The main debate centred on consultation participants who advocated for "increasing the number and scope of the Rangers while others argued that they should stay focused on the current mandate." One participant even advocated that "Rangers should be on full time employment on land and on water." Participants also highlighted the relevance of Indigenous communities conducting local surveillance in their homelands, as well as DND's role in SAR in the North.[26]

The policy explicitly recognizes the role of the Canadian Rangers and commits "to enhance and expand the training and effectiveness of the Canadian Rangers to improve their functional capabilities within the Canadian Armed Forces." Furthermore, it promises "to strengthen Canadian Communities by investing in Youth, including the [Junior Canadian Rangers], as a federally-sponsored youth program that provides Canadians aged 12 to 18 with an opportunity to participate in a variety of fun, challenging and rewarding activities while learning about the Canadian Armed Forces and their local cultures."

Finally, *SSE* commits "to expand and deepen the Defence Team's extensive relationships with remote and isolated communities that are "at the heart of Canada's North," particularly through the Canadian Rangers and Junior Canadian Rangers, but also by engaging local populations as part of routine operations and exercises."

The 2019 ministerial mandate letter directed that the Minister of National Defence "will continue to ensure that the Canadian Armed Forces are an agile, multi-purpose and combat-ready military, operated by highly trained, well-equipped women and men, supported by their Government and by fellow Canadians." It also reinforced "Canada's commitment to our bilateral and multilateral defence partnerships in order to defend Canadian sovereignty, protect North America and enhance international security," including continuing "Canada's strong contributions to the North Atlantic Treaty Organization (NATO) and work with the United States to ensure that the North American Aerospace Defence Command (NORAD) is modernized to meet existing and future challenges, as outlined in *Strong, Secure, Engaged*." Prime Minister Trudeau specifically tasks Minister Sajjan to "work with the Minister of Foreign Affairs, the Minister of Northern Affairs and partners through the Arctic and Northern Policy Framework to develop better surveillance (including by renewing the North Warning System), defence and rapid-response capabilities in the North and in the maritime and air approaches to Canada, to strengthen continental defence, protect Canada's rights and sovereignty and demonstrate international leadership with respect to the navigation of Arctic waters." Although the Rangers are not mentioned specifically, they are connected to Crown-Indigenous relationships, bolstering Northern capabilities, and the directive to work with partners pursuant to the Arctic and Northern Policy Framework.

2.5 ARCTIC AND NORTHERN POLICY FRAMEWORK (2019)

DND/CAF Arctic plans and priorities (and those related to the Canadian Rangers in particular) intersect with and are embedded within the Government of Canada's broader Arctic and Northern policy priorities. Released in September

ARCTIC AND NORTHERN POLICY FRAMEWORK VISION:

"Strong, self-reliant people and communities working together for a vibrant, prosperous and sustainable Arctic and northern region at home and abroad, while expressing Canada's enduring Arctic sovereignty."

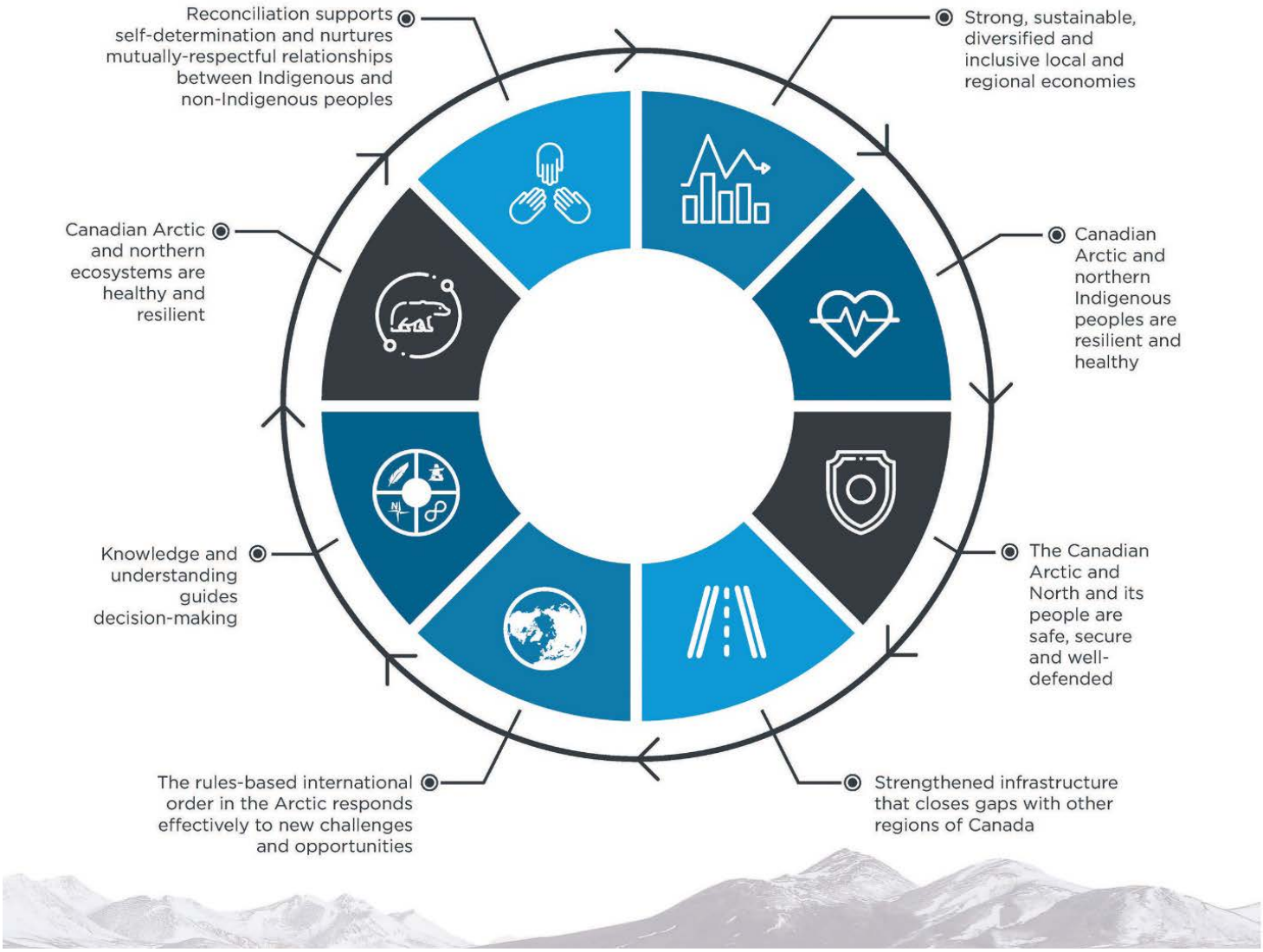

Reconciliation supports self-determination and nurtures mutually-respectful relationships between Indigenous and non-Indigenous peoples
Strong, sustainable, diversified and inclusive local and regional economies
Canadian Arctic and northern ecosystems are healthy and resilient
Canadian Arctic and northern Indigenous peoples are resilient and healthy
Knowledge and understanding guides decision-making
The Canadian Arctic and North and its people are safe, secure and well-defended
The rules-based international order in the Arctic responds effectively to new challenges and opportunities
Strengthened infrastructure that closes gaps with other regions of Canada

FIGURE 2-4: *Arctic and Northern Policy Framework (ANPF) goals (2019)*

2019, Canada's *Arctic and Northern Policy Framework* (*ANPF*) offers "a shared vision of the future where northern and Arctic people are thriving, strong and safe." It envisages a North in which:

- Self-reliant individuals live in healthy, vital communities, manage their own affairs and shape their own destinies;
- The Northern tradition of respect for the land and the environment is paramount and the principles of responsible and sustainable development anchor all decision-making and action;
- Strong, responsible, accountable governments work together for a vibrant, prosperous future for all - a place whose people and governments are significant contributing partners to a dynamic, secure Canadian federation; and
- The CAF patrols and protects the territory through enhanced presence on the land, in the sea and over the skies of the North.

The policy document frames Canada's North as a region undergoing tremendous change. Climate change is reshaping the physical, social, and economic environments in the Arctic, with disproportionate effects on Arctic ecosystems. "The Canadian North is warming at about 3 times the global average rate, which is affecting the land, biodiversity, cultures and traditions," the framework stresses. "Climate change is having far-reaching effects on the lives and well-being of northerners, threatening food security and the transportation of essential goods and endangering the stability and functioning of delicate ecosystems and critical infrastructure." Concurrently, it suggests that "climate change

and technology are making the Arctic more accessible," with diminishing sea ice "open[ing] shipping routes … [and] putting the rich wealth of northern natural resources within reach. Increased commercial and tourism interests also bring increased safety and security challenges that include search and rescue and human-created disasters."

These drivers of regional change, which intersect with rising international interest in the region, heighten uncertainty and complexity. "The opportunities, challenges, increased competition, and risks created by a more accessible Arctic require a greater presence of security organizations, strengthened emergency management, effective military capability, and improved situational awareness," the framework explains. "Meeting these demands necessitates a collaborative approach among all levels of government, as well as with Northerners, including Indigenous peoples, and in cooperation with the private sector where relevant to ensure that the region can prosper and that it continues to be a zone of peace and cooperation." The theme of enhanced domestic partnerships and "shared leadership" runs through the entire policy framework, with "nothing about us, without us" cited as "the essential principle that weaves federal, territorial, provincial and Indigenous institutions and interests together for mutual success."

The *ANPF* emphasizes that "Canada's Arctic and northern governments and communities are at the heart of security in the region." Accordingly, it cites "partnership, cooperation and shared leadership" as essential criteria to "promoting security in this diverse, complex and expansive area." This includes working with "all levels of government, including Indigenous communities, organizations and governments, … to protect the safety and security of the people in the Arctic and the north, now and into the future." To do so, the Government of Canada set the following objectives:

- Strengthen Canada's cooperation and collaboration with domestic and international partners on safety, security and defence issues;
- Enhance Canada's military presence in the Arctic as well as prevent and respond to safety and security incidents in the Arctic and the north;
- Strengthen Canada's domain awareness, surveillance, and control capabilities in the Arctic and the north;
- Enforce Canada's legislative and regulatory frameworks that govern transportation, border integrity, and environmental protection in the Arctic;
- Increase the whole-of-society emergency management capabilities in Arctic and northern communities; and,
- Support community safety through effective and culturally-appropriate crime prevention initiatives and policing services.

While the Canadian Rangers do not have a policing or regulatory role, they contribute directly to these other objectives which, therefore, can serve as broad indicators of success on a national policy scale.

Metric of Success: Rangers, as a continuous military presence in Arctic and Northern communities, are recognized for their role in supporting, promoting, and facilitating cooperation and collaboration with domestic partners on a wide range of safety, security, and defence issues.

Metric of Success: Rangers are recognized and effectively used as part of Canada's domain awareness, surveillance, and control capabilities in the Canadian Arctic and North. As the "eyes, ears, and voice" of the CAF in their home areas, Rangers have access to appropriate channels to report on potential threats to or violations of transportation systems, border integrity, and environmental protection in the Arctic and North.

During the consultation sessions leading up to the *ANPF*, participants identified the Rangers "as an important presence in the region, and support was expressed for enhancing and expanding the Rangers' training and effectiveness." Furthermore, expert Northern stakeholders "expressed appreciation for the way in which the Canadian Armed Forces consult local communities and Indigenous groups, and called for such collaboration to be continued."[27] In a specific paragraph dedicated to the Rangers, the Safety, Security, and Defence chapter of the *ANPF* notes that:

> The Canadian Armed Forces will also continue to deepen its extensive relationships with Indigenous governments, organizations and Northern communities, and will continue to engage with local populations as a routine part of its Arctic operations and exercises. For example, the Canadian Armed Forces will continue to enhance training and the operational effectiveness of the Canadian Rangers so that they can better contribute and respond to safety and security incidents, strengthen domain awareness, and express Canadian sovereignty. The Government of Canada also attaches great value to the Junior Canadian

> Ranger program, as it provides opportunities for youth in remote Arctic and Northern communities to build and share traditional and other life skills in remote and isolated communities throughout the Arctic and North, and across Canada.[28]

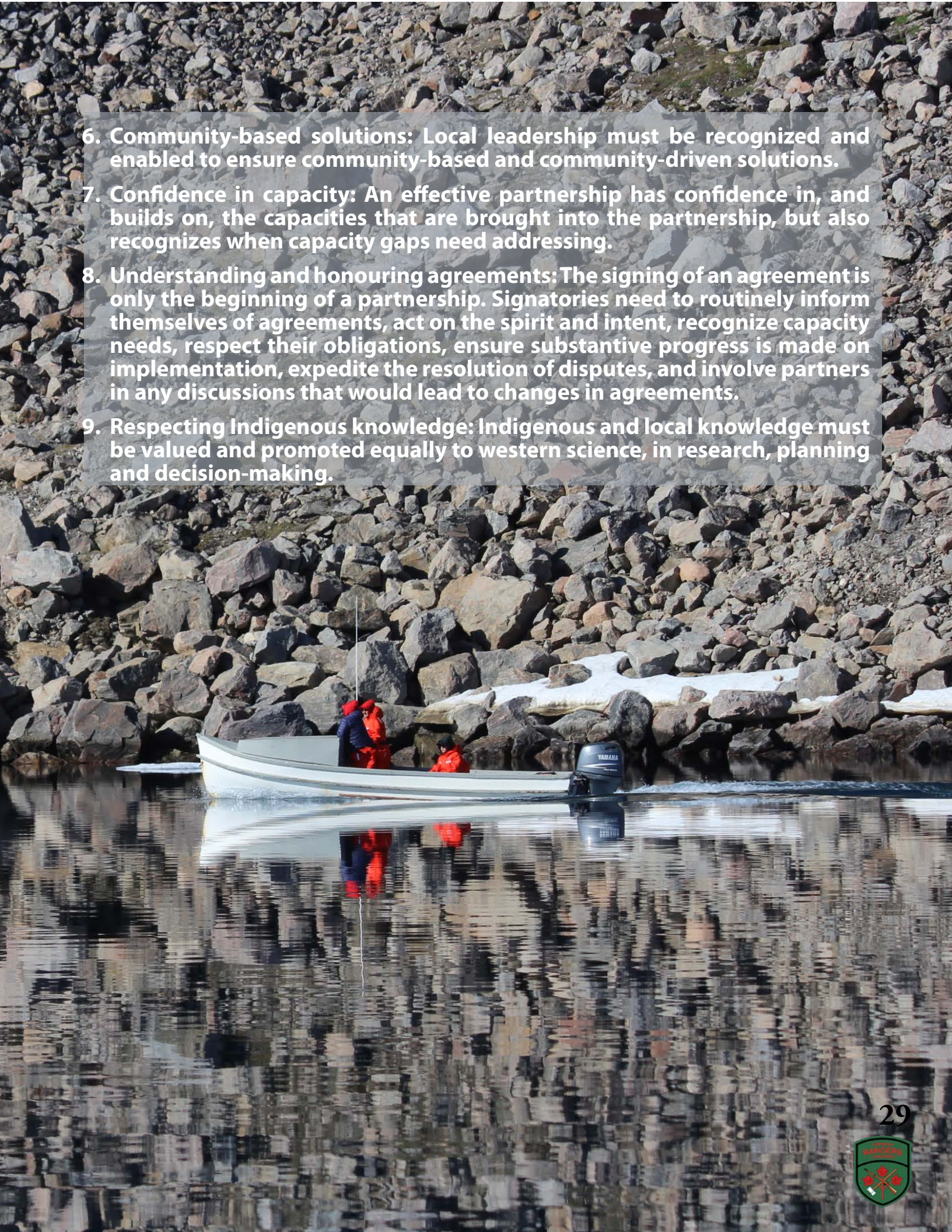
These considerations not only reaffirm *SSE* commitments, they directly connect to *ANPF* priorities related to Northern capacity-building and skill development, traditional knowledge and culture, and youth. The Rangers also embody the spirit of "nothing about us, without us."

Linking the various DND/CAF, whole of government, and Northern stakeholder strategic priorities requires imagination and a holistic approach to conceptualizing opportunities in the Arctic and Northern region. The Commander Canadian Joint Operation Command's 2020 Arctic Regional Operations Plan 2020-2025 emphasizes that "Arctic objectives and activities shall not be done by rote and must provide tangible benefits toward the development of Joint Force capabilities," and that "all Arctic activities shall be leveraged to aggressively advance overall CAF arctic operational capabilities."[29] This same vigour should be applied to supporting more general Government of Canada priorities, where DND's mandate allows it to do so. As the Inuit Tapiriit Kanatami partner chapter to the *ANPF* observes, Inuit Nunangat "suffers from a social and physical infrastructure deficit that contributes to distressing social and economic indicators, inhibits the ability of Inuit to contribute fully to and benefit from Canada's economy and undermines safety and security." Similar observations can be made about other communities – and particularly isolated Indigenous ones – in Canada's Northern Territories. For reasons that we outline in this report, efforts to support and enhance the training and effectiveness of the Canadian Rangers can not only improve their functional capabilities within the Canadian Armed Forces, they also support and bolster the Rangers' contributions to collective and individual resilience in a broader Northern context.

MARY SIMON: PRINCIPLES OF PARTNERSHIP FOR A NEW SHARED ARCTIC LEADERSHIP MODEL (2017)

1. **Understanding and honouring the intent of Section 35 of the Constitution Act of 1982: All partners should understand and honour Canada's commitment to upholding Section 35 of the Constitution and strive to achieve forward momentum in defining how Section 35 can be applied to evolving policy and program initiatives.**
2. **Reconciliation: Reconciliation in partnerships and policy-making involves, at a minimum, a commitment to restoring relationships, seeing things differently than before, and making changes in power relationships.**
3. **Equality, trust, and mutual respect: A true partnership has to be built on equality, trust, transparency and respectful disagreement.**
4. **Flexible and adaptive policy: Nation-building in the Arctic will not be found in one-size-fits-all policy solutions. Policies need to adjust and adapt to circumstances.**
5. **Arctic leaders know their needs: Recognize that Arctic leaders know their priorities and what is required to achieve success.**

6. **Community-based solutions: Local leadership must be recognized and enabled to ensure community-based and community-driven solutions.**
7. **Confidence in capacity: An effective partnership has confidence in, and builds on, the capacities that are brought into the partnership, but also recognizes when capacity gaps need addressing.**
8. **Understanding and honouring agreements: The signing of an agreement is only the beginning of a partnership. Signatories need to routinely inform themselves of agreements, act on the spirit and intent, recognize capacity needs, respect their obligations, ensure substantive progress is made on implementation, expedite the resolution of disputes, and involve partners in any discussions that would lead to changes in agreements.**
9. **Respecting Indigenous knowledge: Indigenous and local knowledge must be valued and promoted equally to western science, in research, planning and decision-making.**



CANADA

MILITARY METRICS OF RANGER SUCCESS

P. WHITNEY LACKENBAUER

> Individual [Canadian Ranger] Patrols are composed of locally-based individuals with extensive knowledge of the land who are independently self-sufficient within their home environments. The mission of the [Canadian Rangers] is to provide lightly-equipped and self-sufficient mobile forces in support of CAF sovereignty and domestic operations in Canada. It is essential that all levels of the CAF and the [Canadian Army] Chain of Command understand the [Canadian Rangers'] Roles, Missions, and Tasks and interpret policy and guidance through this lens.
>
> LGen J.M.M. Hainse, Commander Canadian Army Master *Implementation Directive (MID) Canadian Ranger Organization*, 27 April 2015[1]

In previous books and articles, I have argued that the Rangers are an appropriate and operationally valued component of a Canadian military posture designed to address Northern risks across the defence-security-safety mission spectrum. They serve as enablers for conventional operations, while at the same time supporting "soft security" responses that CAF operational concepts identify as the most probable threats to the Canadian North. This unique component offers core capabilities that meaningfully and practically leverage the rich diversity, knowledge, and skills of Northern Canadians. Although Canada's defence capabilities in the region are modest compared to other parts of the country and many parts of the world, I argue that they are proportionate and sufficient to meet the low probability of conventional military threats that we face to and in the Canadian and North American Arctic. Turning to self-sufficient, locally-based Canadian Rangers as enablers or "force multipliers" for conventional southern-based military units – with the added benefit of having Rangers serve as organized bodies of first responders in and for their communities – is a successful element of a proportionate, sustainable, joint construct to protect, secure, and defend Canada's Territorial North.

As the previous chapter described, the key Arctic defence documents produced by the Canadian military over the last decade all emphasize integrated defence team and whole of government approaches to meet challenges across the mission spectrum.[2]

Within these concepts, the Rangers are situated as enablers for other military components providing combined response capabilities. Lessons learned or post-exercise reports regularly highlight the benefits of this partnership and the need to leverage the Rangers' Indigenous and local knowledge and capabilities to facilitate operations and further develop Regular and Primary Reserve Force units' operating skills in remote areas.[3] These exercises affirm the value of having access to subject-matter experts with extensive experience operating in austere conditions who are willing to share their local and traditional knowledge about lands and waters and provide practical support for activities in what southerners consider to be "extreme environments."

3.1 ROLES AND TASKS[4]

The Rangers are neither intended nor needed as combat forces given the military threat environment facing Canada's North. Although a kinetic role was originally assigned to Rangers in 1947, it was explicitly removed from their official task list in the 2000s because they are neither trained nor equipped for this role.[5] Understanding the Rangers and how they fit within the defence team is key. They are intended to serve as enablers or "force multipliers" for other CAF elements in preparing for Arctic warfare and, presumably, in an actual warfighting scenario (however highly improbable that is in the Canadian North).

> The following tasks may not be assigned to a CR member, except when placed on active service under section 31 of the National Defence Act:
>
> a. undertaking tactical military training;
>
> b. performing immediate local defence tasks, such as containing or observing small enemy detachments pending the arrival of other forces;
>
> c. providing vital point security (e.g. dams, mines, oil pipelines, etc.);
>
> d. assisting federal, provincial, territorial or local police in the discovery, reporting and apprehension of enemy agents, saboteurs, criminals or terrorists; and
>
> e. serving in aid of the civil power.
>
> DAOD 2020-2, Canadian Rangers

The Canadian Rangers are only expected to operate within Canada and are assigned three broad categories of tasks:

1. Conducting and providing support to sovereignty operations (e.g. they are a Canadian Armed Forces presence in Canada's North);
2. Conducting and providing assistance to Canadian Armed Forces domestic operations; and
3. Maintaining a Canadian Armed Forces presence in the local community.

Within these broad categories, they provide a range of specialized services within their areas of operation, including but not limited to:

- Reporting suspicious and unusual activities and collecting local data of military significance including coastal and inland water surveillance;
- Providing local knowledge and Canadian Ranger expertise (e.g. providing survival expertise to Regular Force and Primary Reserve members);
- Participating in Search and Rescue operations;
- Providing support in response to natural or man-made disasters and humanitarian response operations;
- Instructing, mentoring, and supervising the Junior Canadian Ranger Program.

Although Rangers are considered "trained upon enrolment" and are not required to undertake annual training, they receive periodical training in practical skills such as navigation, weapon safety, first aid, and preparing austere landing strips for fixed- and rotary-wing aircraft, and each Ranger patrol undertakes at least one on-the-land exercise per year.

The DND/CAF Ombudsman Office observes that "all Reservists, including Canadian Rangers, are expected to perform certain tasks while not on

duty, including maintaining their uniforms and equipment, communications and planning associated with upcoming training or operations, and being prepared in the event they are called out on service." In addition to these common tasks, "Canadian Rangers are uniquely expected to observe and report suspicious or unusual activity and collect local information of military significance during the course of their daily routine." Although this ongoing, year-round mission is "intrinsic to the role of the Canadian Ranger" and represents the CAF's continuous presence in Northern communities, Rangers are only considered to be on duty status (with the related pay, entitlements, and benefits) when training has been authorized or a specific task has been assigned to them.[6] In those cases, a Canadian Ranger is placed on a class of service ("A", "B", or "C" Reserve Service) and receives suitable compensation as well as related healthcare and other benefits should they become ill or injured while on duty.[7]

The Canadian Army produced a Ranger patrol-type framework (in this case meaning an activity, rather than the community-based sub-unit) in 2013 that distinguishes Canadian Ranger tasks under the Canadian Army lead ("force generation") from those under the authority of the Canadian Joint Operations Command ("force employment"). This Canadian Ranger Patrol Type Matrix applies to Rangers across Canada:

CANADIAN ARMY LEAD:

Type 1 – Basic Training (e.g. field training, traditional skills, mentoring Junior Canadian Rangers) – Class "A";

Type 2 – Individual Training (e.g. building leadership traits) – Class "A";

Type 3 – Collective Training (e.g. familiarization with other patrols/communities) – Class "A";

CANADIAN JOINT OPERATIONS COMMAND LEAD:

Type 4 – Training, Exercise, and Event (e.g. support to Canadian Armed Forces training/exercises) – Class "A";

Type 5 – Domestic Operation (e.g. conduct or assist in Search and Rescue) – Class "A" or "C";

Type 6 – Sovereignty Operation (e.g. enhanced sovereignty patrols) – Class "A" or "C".[8]

While Rangers are assigned a supporting role to assist with Search and Rescue (SAR), CJOC has vested the Commanding Officers of each Canadian Ranger Patrol Group with discretionary power to authorize SAR operations in urgent cases within their area of responsibility, as well as other "life and limb" situations such as "rescue and evacuation of individuals in emergency situations, emergency life-saving treatment, [and] the safeguarding of public health."[9]

Indicator of Capacity: Rangers are placed on the appropriate class of service for tasks that they perform to ensure they receive suitable compensation as well as related healthcare and other benefits should they become ill or injured while on duty.[10]

To adjust the Canadian Ranger Patrol Type Matrix to better reflect activities in Canada's Northern Territories, 1 CRPG differentiates between force generation (FG) and force employment (FE) activities, as well as illustrating its relationships with Joint Task Force (North) (JTFN) in Yellowknife across different patrol types. 1 CRPG falls under the command of 3rd Division, which directs FG activities. Because 1 CRPG spans JTFN's area of operations, however, the joint task force has an interest in – and some influence over – all types of patrols, particularly in light of how individual and collective training activities often involve Rangers operating on the land and waters around their communities.

3.2 1 CRPG OBJECTIVES

According to 1 CRPG's 2018-19 operating plan, the unit's mission is to "enhance its effectiveness and functional capabilities within the Canadian Armed Forces (CAF) while also remaining a relevant partner to communities, to regional/indigenous, territorial and federal government departments and agencies, and to the scientific community in the Arctic and sub-arctic areas of responsibility." To enhance and expand the effectiveness of the Canadian Rangers, it sets eight objectives:

1. increasing overt Canadian Ranger presence at strategic locations, such as the Northwest Passage;
2. increasing the routine and deliberate collection of information to support land, coastal and inland water way domain awareness by the CAF and partners;
3. improving our search and rescue activation and control procedures, in coordination with territorial emergency management organizations (EMO) and JTFN;
4. enabling the Canadian Rangers to conduct critical infrastructure inspections in remote and isolated locations;
5. facilitating improved relations between communities and the CAF;
6. improving the control and communications capabilities between the HQ and patrols and within the patrols;
7. delivering timely and reliable administrative and logistical support to the Canadian Rangers; and
8. implementing risk management strategies that minimize the threats to personnel and equipment, particularly personal equipment.

It sets four objectives to enhance and expand Ranger training, including:

1. implementing unit level individual and collective Ranger Task Standards that will help drive training;
2. improve the training delivery method with a focus on enabling patrols to conduct more training on their own

	JTFN Area of Interest (domain awareness)/some Influence					JTFN Area of Influence	
	Type 1	**Type 2**	**Type 3**	**Type 4**	**Type 5**	**Type 6**	**Engagement**
Activity	Individual and Collective (patrol) Trg	Individual and Collective (patrol) Trg	Ranger Exercise Individual and Collective (multi patrol) Trg	Sp to CAF FG	Sp tasks (FE) to CAF, OGD, NGO	Operations (FE)	Community Events
Description	Unit Directed Mentored Activity	Unit Directed Directed Unmentored Activity	Unit Directed multiple community patrols	-NOREX -Arctic Advisor Crse -Canadian Forces School of Search and Rescue -Canadian Forces	-NWS -Yukon Quest -CROW -Bearwatch -SMARTIce -IMMP	-SAR -N-Series	-Long John Jamboree -Sourdough Rendezvous -Support to youth programs
CA (1 CRPG) Mentored	Yes	No	Most Likely C2	Performs Liaison function	Performs liaison function	Performs Liaison function	Optional

on a schedule that allows for maximum membership participation;

3. increasing weapons training and ranges, to include enabling Patrol Commanders to conduct their own live ranges, where appropriate; and

4. conducting first aid courses for all Canadian Rangers.[11]

From this, the unit articulated eleven success criteria of its performance in meeting these objectives.[12]

Accordingly, we consider these to be existing indictors of "success" applicable to this study. The indicators suggested in this report are intended to supplement rather than replace these and, where appropriate, offer additional or more specific measures based on criteria derived from a deeper analysis of how Canadian Rangers contribute to various forms of resilience.

3.3 CANADIAN RANGER "BATTLE TASK STANDARDS" (FORCE GENERATION – TYPE 1-3 PATROLS)

Pursuant to initiative 108 of *SSE*, LCol Luis Carvallo, the former Commanding Officer of 1 CRPG, devised a set of measurable individual and collective standards that could be applied to the Canadian Ranger training program in the unit based on existing Canadian Army Battle Task Standards (thus applying Canadian Army training language).[13] These standards are intended to serve as a guide for the planning and delivering of training within the unit and to assist the chain of command in making decisions on training and employment of Ranger patrols.[14]

INDIVIDUAL BATTLE TASK STANDARDS include the following:

- **Marksmanship** - safely able to handle and fire the Canadian Ranger service rifle
- **Communications** - operate and maintain communications equipment issued to the Rangers (eg. Track 24, Iridium Satellite phone, and PCX 250 portable radio) including training on proper voice procedure to send a situation report (SITREP), location report (LOCREP), and an unusual incident sighting report

- **Navigation** - navigate cross-country by day or night using conventional military methods (map and compass and GPS) and traditional Northern methods (such as sun and shadows, watches, celestial navigation, prevailing snow conditions, and techniques taught by patrol elders)
- **Bushcraft** - including knots and lashings; use of a compound pulley system to move a static load; tracking in a range of climatic conditions; building an improvised shelter sufficient to protect an individual or small group from climatic conditions for a period of 72 hours; exercising traditional survival skills (such as building a fire, identifying edible and medicinal plants, preparing game, fishing, traps and snares, and signaling fires and ground to air signals); and cold water survival
- **Fieldcraft** - conduct surveillance by establishing an overt observation post (day and night) and passing along relevant information; identify and categorize aircraft; and recognize marine vessels with a patrol's area of operations
- **Search and Rescue** - understand and practice the searcher and team leader core competencies for search and rescue, cold water and ice rescue, and mountain and avalanche rescue (where applicable) to rescue other Rangers while patrolling through complex terrain and to support territorial rescue efforts when formally activated
- **First Aid** - all Canadian Rangers must attain or maintain currency on a first aid and a CPR level "C" qualification, and may complete either the Military Standard First Aid or a Wilderness First Aid course
- **Administration** - attend lectures on pay, allowances and benefits; medical support; the conditions under which Rangers are authorized to use their personal equipment in support of their Canadian Ranger duties (and how to complete a damage claim); dress and deportment (including Operation Honour briefings on what constitutes harmful and inappropriate sexual behaviour and sexual misconduct); an overview of the basic CAF organization, ranks, and operations and activities in the North; and the history, mission, roles and tasks of 1 CRPG.

COLLECTIVE RANGER TASK STANDARDS

include the following:

- **Command and Control** – a Ranger patrol commander must be able to advise a Canadian Army company on an exercise or operation, and a Ranger section commander must be able to advise a Canadian Army platoon on:
  - political issues (key leaders and organizations within the community and setting up meetings with them);
  - the Ranger patrol's capabilities and limitations;

- the local economic situation, including practices to ensure that military activities do not adversely affect the community;
- local customs and traditions (including opportunities for engagement); culturally and ecologically-sensitive sites to be avoided;
- key local infrastructure, capabilities, and limitations (i.e. water, accommodations, communications); and
- the physical environment (i.e. weather, best routes and bivouac sites, safe and suitable activities, methods of survivability and mobility, and ways to reduce the environmental impact of military activities on the land and on the community)
- **Command and Control** - a Canadian Ranger (CR) Patrol or Section preparing to deploy on the land for multiple days to conduct a task or training must be able to: receive orders; issue a warning order; conduct a simple estimate; prepare and issue a simple set or orders; and supervise preparations/ rehearsals

- **Patrolling** - a patrol must be able to conduct a multi-day mounted (eg. snowmachine or ATV) patrol over land and a multi-day patrol by boat along a river or coast line; two patrols moving over-land or by water must be able to link-up at a halfway point between their communities to transfer a load or to work together on a follow-on task; and a minimum of two Canadian Rangers per patrol must be physically capable of guiding a light infantry platoon dismounted on land during the spring or summer
- **Bushcraft** - a Canadian Ranger Patrol must be able to establish a bivouac site so that it can operate self-sufficiently from austere fixed (such as observation posts) or alternating locations (such as way points along a route) for an enduring period of time
- **Fieldcraft** - Rangers must be able to move in proper formation in order to maintain proper control while conducting a patrol on land or water; a Patrol must be able to establish and operate an overt observation post in an area of interest as part of domain awareness, maintaining a 24/7 rotation schedule, communicating with the Patrol headquarters, and producing and submitting siting reports and SITREPs; a Canadian Ranger Section or detachment must be able to work as a reconnaissance element to plan and issue orders, navigate to and from an objective, identify and mark routes around obstacles, and report information back to the Patrol commander; a deployed Patrol must be able to establish and operate a helicopter landing point in

order to conduct a casualty evacuation or to conduct resupply from an austere site; and a deployed Patrol must be able to establish an improvised airstrip (runway) for a CC-138 Twin Otter equipped with skis to land on snow or ice in order to conduct a casualty evacuation or to conduct resupply.

- **Plan and Control Search and Rescue (SAR) tasks**[15] - when local volunteer SAR teams are unable to prosecute a search and rescue and the local SAR Manager determines that CAF support is required, at least one Ranger section in each patrol must be prepared to assist with a search for at least 24 hours. A Patrol Commander acting as the team leader must be able to activate/call-out local Rangers, liaise with 1 CRPG HQ and the local Incident Command Post throughout the deployment period, and coordinate activities with other SAR capabilities (eg. the Civil Air Search and Rescue Association and the Canadian Coast Guard). The Canadian Ranger search team must be able to complete a mission in a safe manner; integrate search theory and search types, patterns, and techniques into search operations; and submit reports. Every patrol should be able to conduct ground and shoreline SAR, as well as cold water rescue. Depending on local terrain, some patrols should be able to conduct mountain and avalanche SAR and/or a maritime or inland water SAR.
- **Identify and Practice Disaster Relief Tasks**[16] - In order to effectively assist their community with humanitarian/disaster relief tasks during an emergency, a Ranger patrol must understand the CAF's role in disaster relief operations, work with community leadership to review the community emergency response plan, and identify and exercise probable Canadian Ranger humanitarian/disaster relief tasks in the community (including training and equipment requirements).
- **Patrol leaders** must be able to administer all stages of a patrol, including personnel, pay and EUR compensation, stores and materiel, vehicle use, and environmental plans for human waste and accidental hazardous material spills.
- **Execute Local Recovery** of a vehicle (snow machine and komatic/sled, ATV, or boat) from complex terrain.
- **Confirm weather forecasts** and identify the impact on the patrol to determine go-no-go criteria.
- **Conduct vehicle and equipment inspections**, and determine load distribution and securing as required.

During land-based patrols, **organize the patrol** into an advance group, main body, and

rear party (each comprised of at least two Rangers); determine an appropriate route, way points, rest areas and bivouac site; communicate effectively within the Patrol, and establish communications with higher headquarters and keep them informed throughout the patrol (including daily patrol movements); employ traditional navigational methods; check on and assist patrol members during halts to help with vehicle and load issues as well as dealing with environmental conditions; ensure a rear party will be prepared to assist with vehicle breakdowns and loads that have become unsecured; and ensure the survival of the patrol.

We note that each one of these task standards can be considered a measurable indicator of individual and patrol-level Ranger competencies and capability. Rangers are not obliged to undergo annual training under their terms of service, so the CAF should not attempt to test or validate these "standards" on a yearly basis or assume that individual Rangers need to meet all of these "standards" to contribute meaningfully to an effective Ranger patrol. More fundamentally, the 2015 Master Implementation Directive emphasizes that Canadian Rangers "do not conform to the principle of universality of service and are deemed trained on enrolment based on their knowledge of the land and not their knowledge of the military or soldiering." Accordingly, "commanders at all levels are to keep this reality in mind when tasking" Rangers.[17]

Metric of Success: Canadian Rangers provide routine and deliberate collection and dissemination of information to support land, coastal, and inland waterway domain awareness by the CAF and partners.[18]

Metric of Success: Canadian Ranger patrols are trained and prepared to support deliberate or contingency operations within their area of responsibility (AOR) in all weather conditions.[19]

Indicator of Success: Each community with a Canadian Ranger patrol is visited at least once each fiscal year by a Ranger Instructor and receives training on and/or exercises the various individual and collective "battle task standards" listed above.

Indicator of Success: Ranger patrols practice and exercise skills and competencies identified in the individual and collective "battle task standards" during Type 1 patrols when Ranger Instructors are present in the community and during organized activities (such as monthly meetings) when a Ranger Instructor is not present.

3.4 CANADIAN RANGERS SUPPORT TO CAF FORCE GENERATION ACTIVITIES (TYPE 4 PATROLS)

The CAF relies heavily on the Canadian Rangers' expertise during exercises and operations in the Territorial North. Canadian Arctic deployments and training for non-Ranger units are conducted as expeditionary operations. Accordingly, having "friends on the ground" with expert knowledge of the areas and/or conditions in which the units are deployed is a force multiplier. While it is beyond the scope of this report to provide a detailed analysis of Ranger support and training to southern-based elements, the overall goal is to help prepare those units to operate with a high degree of readiness and effectiveness in the North.

The CAF Arctic Training Centre (CAF ATC) in Resolute Bay, Nunavut, provides a permanent military footprint in the High Arctic that allows for staging and force projection across the region. The Canadian Army-run centre facilitates training for the Arctic Response Company Groups, the Arctic Operations Advisor Course, Canadian Forces School of Search and Rescue, and the Canadian Forces School of Survival and Aeromedical Training. Rangers from the community and other patrols in 1 CRPG are regularly hired by the CAF ATC to support these training activities. For example, members of 4th Canadian Division's Arctic Response Company Group (ARCG) completed a ten-day training mission based out of Resolute Bay in winter 2015, where they practiced survival skills and tested equipment, clothing, and transport in frigid temperatures and harsh weather conditions rarely experienced in Ontario. "In a land so foreign to the visiting soldiers, local expertise is highly valued," *Nunatsiaq News* reported. "That's where 18 members of the 1 Canadian Ranger Patrol Group came in handy, to share their knowledge of the land." Sergeant Jarloo Kiguktak, a Ranger from Grise Fiord who had been guiding and training with CAF members in the High Arctic since 1978, shared his deep knowledge and experience as a teacher

of Arctic survival methods. "I enjoy the trips and the camping," Kiguktak said. "The soldiers knew how to listen and we had a few laughs."[20]

Southern-based units on Northern Exercises (NOREX) also train in Resolute and other Northern communities. These exercises are intended to maintain an Arctic response capability and are designed to ensure that soldiers develop and retain the ability to move, communicate, and command in austere conditions. This includes exercising first response scenarios.[21] To prepare for these exercises Rangers conduct route reconnaissance and brief southern-based units on what to expect when they operate in the North, and then serve as guides, subject matter experts, and trail parties during the exercises themselves. As advisors embedded within individual sections of soldiers from the south, Rangers serve as teachers and help to ensure safe operations under prevailing local conditions. Rangers help to organize and participate in all community days, which often include traditional games, dancing, and singing. Rangers also provide essential liaison with local organizations, enhance southern forces' understandings of Northern culture, and build positive ties between the military and Northern communities.

Metric of Success: Rangers are consistently engaged in supporting training activities at or staged out of the CAF Arctic Training Centre (CAF ATC) in Resolute Bay, Nunavut.

Metric of Success: Canadian Ranger advice is sought and accepted during all phases of an exercise in 1 CRPG's AOR.

Metric of Success: Canadian Rangers demonstrate interoperability with other CAF elements (such as Immediate Response Units and Arctic Response Company Groups).

Metric of Success: Canadian Rangers are recognized as force multipliers during CAF deployments into Canada's Northern Territories.

3.5 CANADIAN RANGERS IN CANADIAN JOINT OPERATIONS COMMAND (CJOC)-LED FORCE EMPLOYMENT OPERATIONS (TYPE 5-6 PATROLS)

The Rangers are also expected to conduct and provide assistance to CAF Domestic Operations, including support to other government departments, as Type 5 patrols. Operation Nunakput 2017 – which consisted of a series of maritime and safety patrols, water and ground reconnaissance, survival training, and a disaster preparation assessment – is illustrative. Throughout the 4100-km operation along the waterways of the NWT, Rangers connected the naval component from one community to the next, meeting jet boats on the river and arranging overnight camps at each stop. A *News/North* story described the Rangers as "the glue that holds the operation together – the 'eyes and ears' of the North who not only provide fuel, the occasional meal and places for the operation's personnel to set up camp, but knowledge of the local surroundings that is integral to navigating the North." Tulita Ranger Benny Doctor and his grandson, 24-year-old Ranger Sergeant Archie Erigaktuk, shared their survival knowledge with soldiers from 2nd Battalion, Royal 22nd Regiment, including how to build a fire and how to read the river. Erigatuk emphasized the importance of the Ranger-military relationship, explaining how the Army "give us the resources to be trained for certain situations," whether search and rescue, a wildfire, or other "potential hazards." The practical application of this training came during the operation when, after a day-long search and rescue exercise on 16 July, the Tulita RCMP detachment received a distress call about a small Cessna aircraft experiencing engine failure outside the community that was attempting to glide into the local airport. "Erigaktuk doled out instructions to his Rangers on the beach: pack the boats with fuel, rations and prepare for a search in the bush in the event the plane does not land safely," reporter Kirsten Fenn described. "The local Rangers are familiar with the land. At the time of the emergency, they were already mapping out a possible rescue location and resources they could use to help." The day after, Erigaktuk told her that, "especially on the land, you have to be knowledgeable and be quick in your response or things can go wrong really fast…. That's why it's important for us to do our job and them respecting our job as much as we respect their job."[22]

Metric of Success: The Canadian Ranger relationship with other CAF units/elements is based on mutual respect that manifests in a productive exchange of skills that supports and strengthens the CAF's ability to conduct Domestic Operations. Rangers are appreciated for the roles that they do perform, and are not expected to become clones of the Regular Force or Primary Reserves with combat roles.

Rangers also provide support to non-military regional and community events that are important to Northern life. For example, Rangers have built and maintained trails for the Yukon Quest International Dog Sled Race from Whitehorse to Fairbanks, Alaska as an official military exercise since 1984. This allows Rangers to plan and coordinate a complex task, exercise their skills on the land, publicize their contributions, and support a Yukon tradition. In 2018, nearly fifty Rangers from the Whitehorse, Carmacks, Pelly Crossing, and Dawson City patrols broke the 550-mile trail from Whitehorse to the Alaska border, which involved applying their knowledge of the terrain to clearing, setting, marking, and proofing the route. 1 CRPG also leveraged this as a training opportunity (Exercise TAY NAYDAN), with Rangers conducting surveillance and emergency response training along select portions of the trail during the Quest.[23] Other examples of these contributions are discussed in chapter 5 (community resilience).

Metric of Success: Canadian Rangers use their training, organization, and/or equipment to facilitate and support non-military regional and community events and activities.

1 CRPG also supports other federal departments, provincial/territorial authorities, Indigenous governments, associations, and organizations, non-governmental organizations, and scientists often through a Provision of Services arrangement. These activities reflect whole of government and whole of society approaches to Arctic security and resilience. For example, the Canadian Rangers Ocean Watch (CROW) program, established in 2011, is a collaborative undertaking between 1 CRPG, the Department of Fisheries and Oceans (DFO), the Vancouver Aquarium, and other governmental and non-governmental partners to study the salinity of water along the Northwest Passage. By leveraging Ranger knowledge and capabilities, scientists benefit from an expanded timeframe to collect data. DFO scientists train Rangers within their home communities to gather oceanographic data, which scientists and local communities then use to better understand ocean dynamics and climate. "CROW is a way of adding depth to winter observations informing a number of different projects," said Mike Dempsey, a DFO Arctic Oceanographic Technician. "Some of this is climate-related, some is related to fishery issues, and some is monitoring for long-term studies before potential development or increases in shipping. We learn a lot from the Rangers on navigating the ice and winter travel. We love working with the Rangers. They're amazing." In early 2017, DFO science advisors visited Kugluktuk, Cambridge Bay, Gjoa Haven, and Paulatuk and trained local Rangers in the use of various instruments, which they left in the Rangers' hands so the work could continue. Scientists also benefited from access to different forms of Ranger knowledge about the environment. "There's a lot of information available from the elders who do a lot of navigation by eye and by memory about reading snow and ice," Dempsey emphasized. "We're always learning by talking to the Rangers about fish and seals and ice and currents and that sort of thing. The interplay between traditional knowledge and government science is a big part of this."[24] Although the Rangers' roles in assisting with scientific and technology experiments (from drones for local area surveillance to oceanographic research) are not something that they receive military training to do, it draws upon their existing expertise. Furthermore, while testing technology like SmartICE – short for Sea-ice Monitoring and Real-Time Information for Coastal Environments (a climate adaptation tool) – "kind of takes away from traditional skills," one Ranger explained, it also contributes to community knowledge and safety. As a patrol commander from Yukon noted, "the technology of today will be the traditional skills of the future" and does not "detract from our connection to the land."[25]

1 CRPG has also started to work with Nunavut Tunngavik Incorporated's (NTI's) Inuit Marine Monitoring Program (IMMP), Parks Canada, and Environment Canada to synchronize

domain awareness efforts along the Northwest Passage and in other waterways. Pursuant to Operation NUNAKPUT 18 between July and early September 2018, this effort involved the Taloyoak, Paulatuk, Kugluktuk, Pond Inlet, and Cambridge Bay Ranger patrols establishing and operating static observation posts in key locations for fixed durations of time. Rangers were expected to maintain an overt presence and collect domain awareness information that they provided to JTFN to share with other government departments, such as the Canadian Coast Guard, Environment Canada, and Parks Canada. Information was also provided to community liaison officers for dissemination to regional/Indigenous organizations, such as NTI.[26]

Metric of Success: 1 CRPG is able to provide support to other federal departments, provincial/territorial authorities, Indigenous governments, associations, and organizations, non-governmental organizations, and scientists in conducting research, monitoring, and domain awareness activities that contribute to Arctic security and resilience.

Indicator of Capacity: Canadian Rangers have opportunities to attain new training skills and training due to their support of and participation in research, monitoring, and other activities stemming from provision of services arrangements.

Type 6 patrols (conducting and providing support to sovereignty operations) encompass JTFN-led NANOOK-series operations, all of which involve Canadian Rangers, as well as the employment of Rangers in support of search and rescue operations and responses to natural or human-made disasters and humanitarian operations. The roles of the Canadian Rangers in community disaster resilience and SAR are discussed in detail in chapter 4. Ranger contributions to N-series operations from 2007-15 have been summarized elsewhere, as have their participation in Enhanced Sovereignty Patrols (long-range patrols to remote parts of JTFN's AOR).[27] Rebranded in 2018 as four distinct activities held in different Northern communities throughout the year, Operation NANOOK is intended to strengthen the CAF's knowledge of the Territorial North and fortify partnerships with federal, territorial, and local communities. "Working in Canada's North also hones our ability to operate in a challenging environment requiring unique skill sets, in-depth local knowledge and, support and equipment designed to operate in extreme weather conditions," the DND website explains. Accordingly, Ranger contributions - including their assistance with local area preparations for the arrival of CAF/other government departments' elements for sovereignty operations - should be measured against these general criteria.[28]

Op NANOOK-NUNALIVUT is designed to develop and demonstrate CAF winter expeditionary capabilities in the High Arctic. A composite Canadian Ranger element drawn from various Arctic patrols supports this operation, with Rangers sharing their specific knowledge and expertise on extreme cold weather operations and participating in overland patrols. For example, in anticipation of Operation NUNALIVUT 2018, LCdr Melissa Syer noted that the Rangers "embed with the platoons, with the people out on the land. They're a resource for the platoon leaders in terms of operating in the North."[29] During that year's operation, Canadian Rangers played an active role in Cambridge Bay and Resolute, teaching soldiers how to build shelters, fixing broken snowmobiles, and offering advice on how to survive and operate in extreme cold. JTFN commander BGen Mike Nixon emphasized how this Ranger support "means everything" when southern-based CAF elements travel to the North. "When you travel east-to-west across the Arctic, each group has a very unique skill set for the areas in where they reside," he explained. "The Rangers are a part of the army, [and] the two parties collaborating up here is no different than two divisions in the south getting together and conducting operations together." Ranger Matthew Manik from Resolute Bay instructed members of Second Battalion Princess Patricia's Canadian Light Infantry on how to build windbreaks on Intrepid Bay by carving "igloo style blocks" out of snow and stacking them in front of their tents. "They are always asking questions," Manik recounted. "I just tell them what I do and then they try and do it the way I said."[30] These operations can also turn to "life and limb" scenarios, as Rangers conducting a long-range patrol in Naujaat, Nunavut as part of Op NANOOK-NUNALIVUT 20 discovered when they were activated to help with a real-life ground search and rescue for two eco-tourists in distress over 130 km from their location. After a seven-hour snowmobile trek in difficult conditions, the Rangers located the individuals and brought them back to safety.[31]

Op NANOOK-TATIGIIT is a whole of government operation designed to facilitate cooperation and enable CAF support to civilian agencies in the event of a real emergency. This operation, held in the summer, rotates between the three territories on an annual basis. For example, in September 2018, approximately 270 CAF members (including Rangers) participated in a major air disaster exercise in Yellowknife to practice a coordinated response with other government departments, non-governmental organizations, and private

PATROL ENTITLEMENTS (SAMPLE ONLY)

- **15X MAGNETIC COMPASSES**
- **3 X BINOCULARS**
- **4 X SATELLITE PHONES**
- **6 X MARKER DISTRESS LIGHTS**
- **4 X GUN CLEANING KITS**
- **2 X FIELD RESCUE FIRST AID KIT**
- **20 X SNOWSHOES**
- **4 X COLEMAN STOVES**
- **4 X COLEMAN LANTERNS (NAPTHA)**
- **3 X RADIO SET**

D13 105 (Canadian Rangers) version 10 February 2020, copy provided by 1 CRPG.

companies. Following this activity, CAF members worked with partners in and around Yellowknife and Behchokò, NWT, to practice how military and civilian organizations would respond to emergencies and natural disasters. Through a series of escalating scenarios, the CAF (including Rangers), Territorial Government, and local municipal and Indigenous government partners exercised how they would evacuate people in the event of a forest fire.[32] The following May and June, the operation focused on wildlife evacuation training in Yukon so that participants could develop a common emergency operating picture and test and improve emergency preparedness.[33] Rangers from the Carcross, Whitehorse, and Teslin patrols also conducted SAR training near Marsh Lake, and trained with the City of Whitehorse, the Village of Teslin, and the Teslin Tlingit Council on emergency readiness.

Op NANOOK-NUNAKPUT is an annual, marine-based operation focused on asserting sovereignty over Canada's northernmost regions. Rangers from patrols along the coast are activated to set up surveillance sites at locations along the Northwest Passage. Ranger participants at the Kitikmeot Roundtable on SAR hosted in early 2020 highlighted how the growing volume of vessel traffic in the waters of the Arctic Archipelago – from expeditionary cruise ships, to ore-bulk carriers, to pleasure craft – represents a growing concern for their communities (e.g. the risk of marine disaster, increased SAR operations, environmental damage, and challenges to law and order, such as people stealing artefacts from the land, illegal hunting and fishing, bootlegging). Feedback from participants in the 2019 patrol highlighted the value that Rangers place in their monitoring activities, which allow them to contribute to broad national defence objectives while addressing community safety concerns. For example, Kugluktuk's Ranger patrol emphasized the value of NUNAKPUT activities, but also noted that they had difficultly making radio contact with passing boats (which they attributed to VHF issues). Operation NANOOK-TUUGAALIK provides a military presence and domain awareness operation along the Northwest Passage and other Canadian waterways. From July-September 2018 and August-September 2019, Rangers monitored marine traffic in Canada's internal waters (including the Northwest Passage) during the most active season of activity, reporting on what they observed and conducting presence patrols. The Rangers' maritime roles are discussed in more detail in the next section.

Metric of Success: The CAF requests and receives the support of the local Ranger patrol for all CAF operations and exercises taking place in a patrol's AOR or adjacent territory.

Metric of Success: Rangers maintain an overt presence at strategic locations, such as the Northwest Passage.[34]

Through a memorandum of understanding (MOU) between 1 CRPG and the Directorate of Aerospace Equipment Program Management (Radar and Communications Systems), Rangers from various patrols conduct inspections of unmanned North Warning System (NWS) radar sites throughout the year to ensure security of these remote installations. After Rangers have travelled to the sites, they check for any signs of polar bear damage (or any bears taking shelter under the buildings), structural damage to infrastructure, fuel leaks, safety problems with the helipads (owing to ice, snow, or erosion), vandalism, property damage or forced entry, or garbage and debris. They also ensure that all doors and hatches are locked, valves secured, and gauges in place. Once the Rangers have finished with their site inspection, the patrol leader calls the NWS duty technician from a telephone on the site and reports the observations. A written report is also submitted after patrol members return to their home community.[35] These NWS patrols have proven a cost-effective way to reduce the need for expensive overflights and monitoring by the contractors who run the NWS, while offering Rangers opportunities to exercise their land skills and contribute to continental defence.[36] These inspection patrols may also serve as a model for Rangers to help monitor and maintain the layered systems that replace the NWS as part of NORAD modernization plans over the next decade.

Metric of Success: Rangers are able to complete NWS patrols and other critical infrastructure security inspections in remote and isolated locations as assigned, when seasonal, weather, and environmental constraints make it safe to do so.

Indicator of Success: Factors of distance, terrain/ice conditions, and analysis of previous NWS patrols are factored into robust risk assessments[37] and mitigation measures that minimize the risk to Rangers who conduct patrols to remote radar sites.

3.6 MARITIME PATROLS: THE MYTH OF A "NEW" RANGER MISSION[38]

The June 2019 report of the Special Senate Committee on the Arctic, *Northern Lights: A Wake-Up Call for the Future of Canada*, recommends "that the Government of Canada enhance maritime and aerial situational awareness of the Canadian Arctic, including improving the icebreaking capacity of the Canadian Coast Guard, and equipping the Canadian Rangers' with marine capabilities."[39] This recommendation logically flows from the committee's emphasis on the effective enforcement of Canadian regulations in the Arctic. The insistence on equipping the Rangers with new marine capabilities, however, is rather peculiar given that the organization garners only one other line in the entire 138-page report.

Over the past decade, various commentators and federal committees have recommended tasking the Rangers with a wide range of marine roles, ranging from search and rescue, to oil spill response, to marine law enforcement.[40] In April 2009, for example, the Standing Senate Committee on Fisheries and Oceans recommended that the military should make the Rangers "an integral part of the Canadian reserves" and provide them with a "marine capability."[41] Colonel (retired) Pierre Leblanc, the former commander of Canadian Forces Northern Area from 1995-2000, has been the most adamant in insisting on the need to "provide the Canadian Rangers with a maritime role." In February 2018, he advised the Standing Senate Committee on Fisheries and Oceans (which was investigating maritime Search and Rescue or SAR) that the Rangers could "increase our SAR capabilities but also act as first responders to report illegal fishing, initiate action on marine spills and provide a sovereignty presence throughout the Arctic." He advised that giving the Rangers a marine role should be one of the top priorities of the Canadian government to increase SAR capabilities in the region.[42] On several occasions he has suggested that "we could quickly, and at little cost, train and equip Ranger patrols along the Northwest Passage with a respectable sea-capable vessel like the Rosborough boats that are being used by the Department of Fisheries and Oceans."[43] Senator Dennis Patterson, who chairs the special Senate committee on the Arctic, has echoed Leblanc's appeals for an expanded maritime role for the Canadian Rangers, suggesting that they could perform the roles mentioned above, as well as serve in national parks, marine protected areas, assist with the collection of scientific samples, and act as "first responders" in support of whatever else federal departments might require in the marine domain.[44]

The argument that the government should give the Canadian Rangers a maritime role in the Arctic overlooks an obvious and important fact: Rangers already operate in the maritime domain, by boats in summer and by snowmobile in winter. Currently, the Canadian Rangers perform several roles in the maritime domain as part of their broader mission. The official Ranger tasking list includes coastal and inland water surveillance, and during training exercises Ranger patrols often use boats to travel between destinations. While on the water, the Rangers report unidentified vessels, any unusual activities or sightings, and collect local data for the CAF. If the conception of the maritime domain is expanded to include the months that the Arctic waters are covered in ice, Ranger activity in a marine operating environment becomes even more impressive.

The Kugluktuk Ranger patrol is a case in point. From August-September 2018, when 1 CRPG deployed Rangers from patrols across Nunavut and the NWT to monitor the Northwest Passage,[45] Sgt. Roger Hitkolok led his Rangers on a boat patrol from Kugluktuk to Victoria Island to track vessels. They also perform annual checks on the NWS station situated on southwestern Victoria Island near Lady Franklin Point. As part of the Canadian Ranger Ocean Watch Program (established in 2011), the Kugluktuk patrol has acted as guides and collected samples for DFO researchers carrying out oceanographic research in the region – an example of the kind of scientific monitoring that Ranger patrols often undertake on the waters and ice of Canada's Arctic.[46] Several Rangers from the Kugluktuk patrol have

also participated in oil spill and environmental response training over the last decade, which they have received during Operation NANOOK or through the annual training patrols conducted in the communities.

In short, commentators and committees urging the federal government to expand the maritime role of the Canadian Rangers must be aware of the roles that Rangers already perform in the marine domain and of the mandates and missions of complementary community-based organizations operating in the North. There is scope within the Rangers' existing orders and directives to extend the frequency or scale of sovereignty and surveillance patrols that they conduct "as part of the systematic observation of Canada's air, land and ocean areas by all available and practicable means, primarily for the purpose of locating, identifying and determining the unusual movements and activities of aircraft, ships, submarines, vehicles and unknown persons."[47] Rangers should also continue to train for various roles that they might play in a mass rescue operation or mass casualty event in the Arctic maritime domain. These areas of emphasis do not require a "new" maritime role, and should not be used as the basis to change the established practice of having the Rangers use their own boats and snowmobiles to operate in the maritime domain – a practice that enables Rangers to invest in their own equipment and tools, appropriate to their local environment, which they can then use in their everyday lives without having to ask the government for permission. These themes are expanded upon in later chapters. Furthermore, recommendations to expand the Ranger maritime role tend to miss and even undermine the attempts by the Canadian Coast Guard, the Nunavut Inuit Monitoring Program, and the Inuit Guardians initiative to bolster community-based marine capabilities and local maritime domain awareness – a topic discussed in chapter 5 on community resilience.

Rangers employ their own marine vessels for open-water patrolling during the summer and fall for which they receive cash reimbursement according to an established equipment usage rate (EUR). In employing their own watercraft, they are fulfilling the Canadian Rangers' primary mandate, which is to "provide lightly equipped, self-sufficient, mobile forces in support of the CF's sovereignty and domestic operation tasks in Canada."[48] This also recognizes the value of having Rangers use and maintain their own equipment, as well as the military's limited capabilities for providing logistical support and sustenance to community-based patrols distributed across the Territorial North.

Metric of Success: Rangers are recognized for their ability to function effectively on land and water (in both a frozen and liquid state) and can respond effectively to various situations, either independently or in the support of other organizations.

Metric of Success: Ranger patrols coordinate their efforts with other community-based organizations responsible for maritime domain awareness and marine safety (such as the Canadian Coast Guard Auxiliary, Nunavut Inuit Monitoring Program, and/or Inuit Guardians).

3.7 EQUIPMENT AND EUR

The Canadian Army considers the Canadian Rangers "to be fully trained, self-sufficient, lightly-equipped, and fully clothed to operate in their Area of Responsibility (AOR) upon enrolment."[49] That stated, sustained funding has supported ongoing material "enhancement" efforts over the last fifteen years, including the Canadian Rangers Equipment Modernization Project intended to provide Rangers with "light equipment of the best quality to allow them to perform their tasks effectively."[50] Patrols have received satellite phones and new radios to address communication gaps, and the military has promised to pre-position more equipment in communities so that Rangers can respond more quickly to emergencies.[51] Although Rangers are still expected to wear their own environmentally-suited clothing on operations, a "clothe the Ranger" program has supplemented their famous red hoodie with new jackets, rain suits, and other accoutrements. Finally, the Rangers have received a new bolt-action .308 rifle (C-19) as part of the Army's Small Arms Modernization Project to replace the venerable .303 Lee Enfield No.4 (which was difficult to maintain owing to a scarcity of replacement parts).[52] Accordingly, patrols are provided with individual items that form the basic Canadian Ranger entitlement, as well as equipment issued to each patrol (such as tents, stoves, lanterns, satellite phones, Track-24s, HF and VHF radios, GPS units, first aid equipment, and rations). A 2015 Army directive clarifies that "entitlement does not necessarily mean that an item has to be issued," and that particularly in the Canadian Ranger/"remote access context, the distribution of a minimal amount of equipment is preferred."[53]

The logic behind having Canadian Rangers purchase, maintain, and use their own environmentally-appropriate clothing and equipment is poorly understood in broader military and public circles. Although southern Canadian media commentators often criticize the lack of equipment and clothing provided to Rangers compared to their Regular and Reserve Force counterparts, our conversations with Rangers confirmed that these critiques are generally ill-informed or misplaced.[54] The diverse landscapes in which Rangers live and operate prescribe different equipment and clothing needs.

The Rangers are well known across the North for their "red hoodie," and are also provided with CADPAT pants, military boots, and jackets intended for use on Temporary Duty (TD), parades, and other ceremonial activities.[55] On operations, however, Rangers are expected to use their own environmentally-appropriate clothing, which they deem best suited to local conditions, rather than being assigned standard military gear. Although some Rangers have asked 1 CRPG to issue winter parkas and boots to Rangers who do not have adequate personal clothing, this overlooks the requirement that Rangers be "self-sufficient" to operate on the land – a core ethos that has guided the Ranger organization since 1947. Furthermore, issuing, accounting for, maintaining, and replacing full outfits of military-issued clothing that is suited to diverse regions in the Territorial North, in all seasons, would impose an excessive logistical burden on 1 CRPG.

During training and official taskings, DND compensates Rangers when they use their own small-engine equipment (such as ice augers, chain saws, generators, and welding machines) and vehicles (including snowmachines, all-terrain vehicles/ATVs, dog teams, and boats) on duty according to a fixed Equipment Usage Rate (EUR). This allows Rangers to identify and use appropriate equipment and tools suited to the area in which they live, and it also means that the military does not have to assume an unnecessarily high sustainment burden when it comes to maintaining equipment dispersed across 65 communities in the Territorial North and northern British Columbia. During 1 CRPG leadership sessions, Rangers have raised questions about specific compensation rates, and the appropriateness of having the same fixed rates applied across the three territories (given cost of living differentials in communities with road access and those without). Responses explained that the Canadian Army reviews these rates periodically and adjusts EUR accordingly, but that rates can be adjusted both up or down (and thus lobbying for a review of EUR rates can be a double-edged sword).

In general, compensating individuals to use their own, privately-owned equipment (rather than government-owned assets) encourages Rangers to procure appropriate vehicles and vessels to operate in their home environments while representing a material contribution to local capacity-building (see chapter 5 on community resilience and chapter 7 on individual resilience). Providing Rangers with CAF-owned snowmobiles, all-terrain vehicles (ATVs/quads), and boats would not only add a tremendous logistical burden on the military, it would also undermine the guiding philosophy that Rangers are best suited to make their own decisions about what they need to operate comfortably and effectively across diverse Northern environments. Asking the right questions is important.

When Rangers are asked if they would like the military to give them vehicles and equipment, most respond affirmatively. When Rangers are asked whether they would prefer being given equipment owned and maintained by the military (with all the proverbial strings attached) or provided EUR for use of their own equipment over which they retain full control while not on authorized Ranger training or operations, conversations during focus groups over the last two years (and my conversations with several hundred Rangers over the last two decades) confirm that the vast majority of Rangers support the latter option.

If a Canadian Ranger's equipment breaks during an approved operation or task, they are entitled to compensation for loss of or damage to personal property. As discussed in chapter 7 (individual resilience), the loss of access to vehicles and equipment can have serious affect a Ranger's ability to pursue a subsistence livelihood. Unfortunately, in the mid-2010s, many Rangers cited lengthy delays in receiving reimbursements for damage claims as a regular and acute concern.[56] Reports from patrol commanders at the last two Ranger leadership meetings in Yellowknife in 2018 and 2019 suggest a marked improvement in the speed of processing damage claims, and it is essential that this responsiveness continue so that Rangers retain trust in a system that depends upon them to be willing to use their own vehicles and equipment.

Most common reasons for delays in reimbursement for loss and damage claims:

1. **LACK OF ACCESS IN REMOTE LOCATIONS – PARTICULARLY IN THOSE COMMUNITIES ONLY ACCESSIBLE BY AIR**

- Delay in Reporting: The Ranger will most likely experience a delay in reporting damage to personal equipment that occurs during an authorized activity when no military staff member is present.
- Delay in Obtaining Quotes: It is very challenging and takes an unreasonable amount of time for a Canadian Ranger to obtain quotes for damaged parts or equipment.
- Delay in Obtaining Signatures: There are instances when computers are not accessible. Claims must be filled out at headquarters and subsequently mailed – and sent back and forth to the community for the Canadian Ranger and then Commanding Officer's signature or approval.
- Delay in Reimbursement(s): The lack of access to staff and to office locations can cause delays for Canadian Rangers seeking reimbursements.

2. **THE ISSUE OF INCOMPLETE AND/OR INACCURATELY FILLED-OUT PAPERWORK**

- Standard Operating Procedures: There is no standard operating procedure observed by all units for filling out and submitting claims.
- File Complexity: More complex claims may require further review, clarification, and additional signatures, by the different levels of the organisation.

Gary Walbourne, "Ombudsman Message: Rangers Loss Damage Claims," 15 March 2017.

Indicators of Capacity:

- ***What percentage of patrol members have environmentally-appropriate clothing to operate safely in their local area of responsibility at all times of the year?***
- ***What number and percentage of patrol members own a snowmobile?***
- ***What number and percentage of patrol members own an ATV?***
- ***What number and percentage of patrol members own a boat?***

Metric of Success: Rangers are provided with a C-19 rifle, clothing, and an appropriate allocation of equipment that reflects the purpose and intent of the Canadian Ranger mission and does not detract from its ethos as a "lightly-equipped, self-sufficient" organization.

Metric of Success: Canadian Ranger equipment is managed and maintained in accordance with military life-cycle management processes and sustainment plans,[57] with due respect for challenges associated with limited capability for logistical support and sustainment, Northern environmental conditions, and limited capabilities of patrols to accept and maintain military equipment.

Metric of Success: Rangers are reimbursed for approved claims for loss of or damage to personal property used during an approved operation or task in a timely manner.

3.8 CRITERIA FOR SUCCESS: DIVERSITY

> Most importantly, the Canadian Armed Forces must reflect the diversity of the country we defend. We need a military that looks like Canada.
>
> DND, *Strong, Secure, Engaged* (2017, 20)

The Rangers are neither a military nor an Indigenous *program* (as they are sometimes misidentified), but rather a subcomponent of the Reserves that embodies the benefits of leveraging the unique skill sets of Canadians from diverse ethnic and social backgrounds to support home defence and public safety. With a firm commitment to Gender-Based Analysis Plus (GBA+), *Strong, Secure, Engaged* highlights that "building a Defence team composed of people with new perspectives and a broader

range of *cultural, linguistic, gender, age*, and other unique attributes will contribute directly to efforts to develop a deeper understanding of our increasingly complex world, and to respond effectively to the challenges it presents [emphasis added]." Accordingly, we highlight the need for robust metrics to gauge 1 CRPG's success in achieving broader DND/CAF objectives to capitalize on the unique talents and skill sets of the diverse Northern Canadian population. Being able to leverage this expertise is highly valuable, particularly in isolated Northern communities where Indigenous peoples make up a high proportion of the population and southern-based CAF units have less familiarity with operational constraints related to environmental conditions and mobility.

Canada's three Northern territories constitute a diverse human geography, with Indigenous peoples comprising a substantial portion of the population. Combined, the territories were home to just over 113,600 people in 2016, representing 0.3% of the total Canadian population. Outside of the territorial capitals, most residents live in small, dispersed communities, many without road access, with concomitant challenges of economies of scale and the delivery of government services. Whereas Indigenous people (First Nations, Inuit, and Métis) made up 4.3% of the total Canadian population in the 2011 census, they comprised 23.1% of the population in Yukon, 51.9% in the Northwest Territories, and 86.3% in Nunavut.

Unfortunately, military self-identification data for 1 CRPG offers a highly distorted portrait of the patrol group's ethnic composition. Only 25.6% of Rangers in 1 CRPG had completed a CAF cultural self-identification survey by July 2016, with only 19.8% of respondents in the unit self-identifying as Indigenous people.[58] These statistics are a poor indicator of how Ranger patrols in 1 CRPG actually reflect territorial and regional demographics. Conversations with Rangers, Ranger Instructors, and 1 CRPG headquarters personnel, as well as analysis of active Rangers on a recent unit nominal roll, suggest that at least two-thirds (and likely more than three-quarters) of all Canadian Rangers across the Territorial North are of Indigenous descent. The rates of Indigenous participation are highest in Nunavut and the NWT, with Yukon having higher numbers of non-Indigenous members, as the demography of the territories would predict.

KEY SUCCESS CRITERIA	HOW SUCCESS IS MEASURED
Relevance of the Canadian Rangers to their communities is maintained.	• # SAR activation (Type 6) • Patrol activities are coordinated with the chief(s)/mayor/council and information is shared after a patrol • Canadian Ranger participation in important community events
Relevance of the Canadian Rangers to the Canadian Armed Forces, OGDs, and non-governmental organizations (NGOs).	• # of CAF Type 4, 5, and 6 activities supported • Domain awareness passed to JTFN • # of Type 5 OGD tasks supported (ie. CROW) • # of Type 5 NGO tasks supported (ie. Bearwatch/SmartICE)
Command and Control. Communications with and amongst the Patrols are enabled.	• 1-800 system functioning is monitored by a duty officer • Satellite communications equipment available to each Patrol • Reliable emergency notification and tracking system issued to all Patrols and Sections • APX-4000 issued to all Patrol (2/HQ and 2/Sect)
HQ Stewardship. Personnel administration is processed in a timely manner ensuring the effectiveness of the unit.	• Two CR per patrol are Advance Wilderness First Aid qualified • All medical injuries are reported to the Adjutant within 48 hrs of injury • Recruiting and releases back logs reduced to one month • CR with 12 years of service or more receive a Depart with Dignity on voluntary retirement • Deaths are dealt with promptly and families receive the necessary support and recognition within 30 days of notification • Damage claims processed through to higher HQ within one month of receipt by the unit
Self-Sufficient. Canadian Ranger Patrols are capable of planning and executing patrols on their own for a period of no less than 72 hrs.	• Number of Type 2 Patrols and independent Type 3, 4, and 5 patrols per calendar year • Individual and Collective Ranger Task Standards implemented and tracked quarterly
Self-Sufficient. All Canadian Rangers are trained to deal with medical situations while on the land.	• 20 CR Patrols per year are offered a First Aid/Wilderness First Aid Course • Two CR per patrol are Advance Wilderness First Aid qualified
Self-Sufficient. All Patrols have the infrastructure necessary to support routine.	• All Patrols have two CR and one JCR designated storage facilities in the community (10 locations completed per year) • Select Patrols have office space within the community
Investing in Youth. All JCR are provided a well-structured and resourced program that affords them culturally relevant and challenging activities.	• Each JCR Patrol has a three to six month plan for weekly activities that has been consulted with the community's leadership • Each JCR patrol completed two weekend training activities • JCR Patrol store requests are actioned promptly
Investing in Youth. JCR are afforded challenging and exciting centralized activities, such as summer camps and shooting competitions.	• More than 340 JCR attend an ETS (combination of ETS, LETS, and NLETS) as a participant or as JCR staff • All JCR Patrols are afforded an opportunity to compete in a Territorial Shoot
Gender Equity. *SSE* gender-based targets achieved/exceeded.	• 1 CRPG HQ and Patrols consist of no less than 25% female membership, to include Ranger Instructors • No less than 25% of 1 CRPG leadership positions are held by females
Outreach. All Canadian Ranger Patrols have supported a local on-the-land youth program.	• All JCR Patrols completed two weekend training activities • Communities with Cadets are supported in at least one weekend activity • Communities without JCR or Cadets received support to one on-the-land youth program

Source: 1 CRPG Operating Plan Fiscal Year 2018-2019

Given the defence policy's commitment to "better forecast occupational requirements and engage in more targeted recruiting, including capitalizing on the unique talents and skill sets of Canada's diverse population,"[59] the successful inclusion of Northern Indigenous peoples in the defence team through the Rangers represents an important case study. Furthermore, more robust statistics on Indigenous participation rates in 1 CRPG could significantly alter the overall representation rates in the CAF more broadly (as discussed in chapter 1).

Metric of Success: Territory-level or regional statistical analysis of Rangers in each territory shows that Indigenous participation rates are proportionate to the Indigenous percentage of the territorial or regional population as a whole.

At the local level, individual patrols should be representative of their communities' ethnocultural and linguistic diversity. These are important considerations, given the Government of Canada's strong focus on the centrality of Northern Indigenous leadership and the defence policy statement that "Indigenous communities are at the heart of Canada's North" and the military will "work to expand and deepen our extensive relationships with these communities, particularly through the Canadian Rangers and Junior Canadian Rangers."[60] Accordingly, it is relevant for 1 CRPG to assess how reflective Ranger membership is of local demographics.

Metric of Success: Ranger patrols are reflective of local demographics in terms of Indigenous participation rates.

Rates of female participation in the Rangers (and in elected leadership positions) are appropriate measures of CAF commitments "to gender equality and providing a work environment where women are welcomed, supported and respected."[61] As noted in chapter 1, there were 408 female Rangers in 1 CRPG as of December 2016, representing 22.7% of the unit strength – a much higher percentage than in the Regular Force or Primary Reserves across the CAF (15%). Furthermore, 13.3% of patrol sergeants, 21.9% of master corporals, and 25.4% of corporals were women.[62] Building on this solid foundation, 1 CRPG should aspire to be a leader in gender balance in the CAF by seeking to increase the representation of women in the unit (and particularly in leadership positions) and promoting the myriad contributions of female Rangers throughout the North.

Indicator of Capacity: There is a stable or increasing number of women serving as Rangers in 1 CRPG, not just in aggregate but by region and individual patrol.

Metric of Success: Increasing numbers of women are serving in Ranger leadership positions across the unit.

Metric of Success: Female Rangers are respected and feel welcomed and appreciated as Rangers, and their contributions are promoted by the unit and by the CAF more generally.

During our focus group discussions, Rangers also highlighted the importance of developing and sharing knowledge and skills across generations. Accordingly, analyzing the age profiles of the unit at territorial, regional/zone, and patrol levels can yield important insights into the "health" of patrols and the unit. The statistical profiles provided in a companion volume to this report provide examples of how data can be used to assess the demographic profiles of patrols and zones.

Indicator of Capacity: Ranger patrols represent an appropriate balance of members from various age groups (including elders).

3.9 "GROWING" THE NUMBER OF RANGERS AS A POOR METRIC OF SUCCESS

DND's Defence Plan 2018-2023: Operationalizing Canada's New Defence Policy (2018) notes that the Canadian Army:

> will continue its review of the Canadian Rangers and enable growth as resources allow. The Canadian Rangers are integral to northern surveillance and regularly provide support to ground search and rescue. They are Canada's eyes and ears in the sparsely settled northern, coastal and isolated areas of Canada. In response to the Minister's mandate letter, Defence will continue to focus on surveillance and control of Canadian territory, which includes *increasing the size of the Canadian Rangers* as well as other capability enhancements. [emphasis added]

This return to language about increasing the size of the Canadian Rangers as a metric of enhanced capability is, in my view, a poor metric of gauging the "success" or "health" of the organization in the Territorial North. During the Defence Policy Review consultations in 2016, I provided a submission emphasizing that:

> Rather than expanding the number of Canadian Rangers (as suggested in the Minister's mandate letter), resources

> should be allocated to increasing the number of Ranger Instructors and CRPG staff to support them. The recent expansion to 5000 Rangers across Canada has already over-stretched resources, and consolidating this previous growth by strengthening the CRPGs will improve the effectiveness and sustainability of the Rangers while improving the health and wellness of military members who support them.[63]

The logic flowed from observations during the previous round of Ranger expansion in the late 2000s, which had been driven by political considerations rather than any evidence-based calculations that more Rangers would improve the effectiveness of 1 CRPG. In a 2013 paper titled "If It Ain't Broke, Don't Break It," I summarized some of the tensions that flowed from the Harper government's promise to expand the Canadian Rangers to an average paid strength of five thousand members by fiscal year 2011-12.[64] "There is no evidence that increasing the Rangers' size would have any effect on the Canadian Forces' ability to fulfill its mission," I noted. "Five thousand Rangers would not provide more security or more sovereignty than forty-two hundred Rangers. By championing Ranger expansion, however, the new government could claim an existing success story as its own." Ultimately, the simplistic equation that "more is better" proved a poor substitute for a substantive, evidence-based appraisal of what size of Ranger presence, with what skills and training, would enable the CAF to achieve practical goals in the North. Numeric growth does not mean greater effectiveness, even if it may hold political appeal as a simple way to indicate that a government is doing "more" than its predecessors. A lack of in-depth thinking and creativity about how DND/CAF resources could best be used to enhance Ranger effectiveness harmed the organization.

Ironically, despite the government's strong focus on Arctic sovereignty and the political packaging of Ranger expansion as an Arctic security-bolstering initiative, 1 CRPG saw the smallest percentage of overall growth of patrol groups across the country. After all, the Rangers organization had a long-established, permanent footprint in every High Arctic community and this presence, coupled with simple demographics, limited expansion possibilities north of the treeline. Captain Conrad Schubert, the deputy commanding officer of 1 CRPG, reported in October 2007 that military participation rates in the Territorial North were "already more than five times the national Canadian average with 1.44% of northerners serving as Canadian Rangers against 0.27% of Canadians serving in the Regular Force and all other reserve components." In many communities, most able-bodied adult members already participated.[65] Every community in Nunavut had a patrol except Bathurst Inlet (an Inuit outpost in the Kitikmeot Region with no year-round residents).[66] Five communities south of the treeline in the NWT and Yukon could accommodate new patrols – all of which have been stood up since that time.[67] Overall options for expansion were limited, however, in terms of the "breadth" of additional Ranger presence that could be achieved in the Arctic by opening new patrols.

At the time, expansion plans met with a mixed response at the 1 CRPG unit and patrol levels. When the unit cleaned up its administrative files and removed inactive personnel from its nominal roll in 2009 as a precursor to expansion, its Ranger strength actually decreased by 300 members. Although this did not surprise local patrol commanders, they now faced pressure to make up "lost ground" in addition to expanding their membership more generally. Some long-serving Rangers expressed concern that increasing numbers for arbitrary political reasons could actually dilute the quality of recruits and destroy the fabric of their patrols. As self-administered units, many patrols managed to strike a healthy balance between youth and experience – considerations that a crude metric of simply counting the general number of Rangers did not reflect or respect. A rapid influx of people without experience on the land or the right chemistry with existing Rangers could lessen the patrol's ability to respond confidently in an emergency.[68]

Instead of maintaining the long-established practice of having community-based patrols identify prospective Rangers, 1 CRPG experimented with directly recruiting people from the North through its Yellowknife headquarters, training them at a DP1 Basic Ranger course at a centralized location, and then having them join

their patrols. This disempowered the patrols and threatened to undermine the self-governing ethos that had always guided the organization at the community level. For example, MCpl Baba Pedersen brought forward concerns from the Kugluktuk patrol about the recruitment process to the October 2009 Ranger leadership meeting in Yellowknife. "We would like each Ranger patrol to be able to vote in new recruits, who would then go through the DP1 course to become a member of our patrols," he emphasized. Other Ranger patrol leaders echoed his recommendation.

In response to Ranger feedback, 1 CRPG Headquarters soon reversed its direction and stopped recruiting directly from Yellowknife. Furthermore, 1 CRPG resisted pressure from Ottawa to dramatically expand the number of Ranger positions and eventually settled on a more modest target of 1800 Rangers in 60 patrols by 2012.[69]

Although there is a wide discrepancy between the number of Rangers on the unit nominal rolls and the number of "active" Rangers (estimated at 1350 in 2020), this should not be considered a "failure" on the part of patrols because of long-standing issues with releasing inactive Rangers, the high proportionate rates of Northern service in the Rangers, and demographics in individual communities.

In short, recent history, as well as conversations with Rangers over the past two years pursuant to this project, point to the dangers of increasing the authorized number of Rangers in 1 CRPG as a measure of "success." As discussed in section 2.4, the Commanding Officer of 1 CRPG and other expert voices worked diligently to have the language in the Minister's 2015 mandate letter (which spoke of increasing "the size of the Canadian Rangers") adjusted to focus on an *expansion of capability*. The latter was reflected

in the 2017 defence policy. Unfortunately, the recent retreat to the earlier language[70] may indicate a failure to understand the reasons behind the nuanced language in *Strong, Secure, Engaged* or a simple institutional laziness to develop more creative and appropriate ways to measure how the CAF can "enhance and expand the training and effectiveness of the Canadian Rangers to improve their functional capabilities within the Canadian Armed Forces." Arbitrarily seeking to increase the number of Rangers in 1 CRPG would place additional pressures on unit and patrol resources. While various CRPGs "south of 60" are requesting growth, we have found no indication that 1 CRPG has done so. Instead, ongoing efforts to process releases more efficiently and remove "non-effective Rangers" from 1 CRPG patrol nominal rolls (with the possibility of re-allocating positions from "under-strength" patrols to those with waiting lists of qualified applicants) represent a more appropriate goal.

Our conversations with Rangers confirm an old assessment drawn by a CAF officer in the early postwar period: "having the right Rangers in the right locations, doing the right things, is more important than having more of them."[71]

Metric of Success: The size of each Ranger patrol is appropriate given the population size and demographics of the community in which it is based, and is diverse in terms of age and gender. Patrols should not be forced to expand in numbers for political reasons from outside the local area that are not grounded in improving the Rangers' "effectiveness and functional capabilities within the Canadian Armed Forces (CAF)," and patrol members have a direct say in determining which new community members should be invited to join their patrol (see also fate control in chapter 7).

JDS
ENERGY & MINING

COMMUNITY DISASTER RESILIENCE AND SEARCH AND RESCUE (SAR)

PETER KIKKERT AND P. WHITNEY LACKENBAUER

Crisis management and emergency preparedness practitioners and scholars have turned to the concept of resilence in the face of the increased frequency and severity of disasters and emergencies around the world. The literature on disaster resilience includes various thresholds for a disaster event – some incorporating everything from abrupt and unanticipated shocks, such as an earthquake, to long-term stresses, such as resource degradation. This report follows A.C. McFarlane and Fran Norris in defining a disaster as "a potentially traumatic event that is collectively experienced, has an acute onset, and is time delimited; disasters may be attributed to natural, technological, or human causes."[1] Within this framework, key variables are the speed, suddenness, and severity with which a disaster occurs. The concept encompasses acts of nature, such as hurricanes, floods, forest fires, and earthquakes, as well as industrial and transportation accidents or infrastructure failures.[2] Given DND/CAF's mandate, the Canadian Rangers are intended to play a supporting role in whole of government responses to emergencies, with lead responsibilities vested in other government departments and agencies. Nevertheless, our research reveals that community-based Ranger patrols bring together many of the key building blocks of community disaster resilience. They represent a clear example of how community disaster resilience can be strengthened from the bottom up, with the CAF empowering Rangers to use their existing skills and social relations within an organizational structure that provides them with a framework, training, and equipment to assist in every phase of disaster management. In this chapter, we identify key characteristics and capabilities that make many Ranger patrols cornerstones of disaster resilience in their communities and frame how these might be used to measure the organization's "success" in supporting whole of government resilience efforts.

4.1 DEFINITION AND KEY THEMES

The literature on emergency management often draws a sharp line between emergencies and disasters. An emergency is often described as an adverse situation that calls for a prompt local response

to save lives and/or protect property, relying on existing resources. A disaster is a more serious event causing or threatening to cause widespread losses and damage, disrupting essential services, and requiring a response that surpasses the capacity of local resources.[3] In remote Northern communities, this distinction becomes blurred. When community members go missing on the land, ice, or water, the search for them can push a community's resources to the limit and demand external assistance. Furthermore, in Northern communities, "an emergency event, whether caused by human or natural factors, can quickly cascade into a more profound situation because of remoteness, weather, limited transportation and communication options and other factors."[4] For example, systems failures in these communities – such as a broken diesel generator, water shutdown, communications breakdown, or a failed resupply – might start as an emergency but can quickly spiral into a disaster, particularly in winter.

Some scholars now argue for the establishment of a special category of "cold disasters," given extreme Arctic environments, remote and isolated communities with small populations, and limited physical and human infrastructure. Complex jurisdictional landscapes involving multiple levels of government and myriad agencies and organizations also complicate disaster responses in Arctic and Northern contexts.[5] These characteristics require strong local response capabilities and amplify the need to build disaster resilience in isolated communities.

THE SAFETY, SECURITY, AND DEFENCE CHAPTER IN THE ARCTIC AND NORTHERN POLICY FRAMEWORK (ANPF) COMMITS TO "INCREASE WHOLE-OF-SOCIETY EMERGENCY MANAGEMENT CAPABILITIES IN ARCTIC AND NORTHERN COMMUNITIES." IT EMPHASIZES STRENGTHENING COOPERATION BETWEEN FEDERAL, TERRITORIAL, AND LOCAL GOVERNMENTS TO BOLSTER EMERGENCY MANAGEMENT IN THE NORTH, WHILE ENHANCING INDIGENOUS PARTICIPATION AND BUILDING

Public Safety Canada, *Emergency Management Strategy for Canada: Toward a Resilient 2030* **(2019), 9.**

Definitions of disaster resilience abound. The Justice Institute of British Columbia, which has created systematic planning guides to build both Rural Disaster Resilience and Aboriginal Disaster Resilience, identifies disaster resilience as a "community's ability to anticipate, and where possible prevent or at least minimize the potential damage a disaster might cause. It involves how well a community can cope with the effects of a disaster if it occurs, to maintain certain basic functions and structures during the disaster, and to recover and adapt to the changes that result."[6] Other scholars and organizations emphasize the "sustained ability" of a community to respond to disasters,[7] its ability to draw upon "local resources" and/or the personal and collective capacities of its people, and its ability to respond in a way that complements the work of outside organizations.[8] Emergency management organizations and scholars note how the connection between resiliency and the broader community context can exacerbate risks or strengthen resilience. Canadian scholar Robin Cox explains that disaster resilience "acknowledges and accounts for the ways in which people and the built and natural environments in which they live may be vulnerable" and "is a place-based concept, recognizing the importance of context, culture, and the unique constellation of resources, capacities, and vulnerabilities that exist in a specific location."[9]

Scholars explain that a community with resilient individuals does not necessarily equate to a resilient community. Judith Brown and David Kulig observe that "people in communities are resilient together, not merely in similar ways."[10] Although previous emergency management plans tended to focus on individual household disaster preparedness efforts, community resilience frameworks are "moving from the 'me' to the 'we,' and from the 'we' to the 'us.'"[11] A resilient community's population can "work in concert and in such a way that the interdependencies among them provide strength during a disaster event."[12]

Metrics around Canadian Ranger contributions to resiliency align with Public Safety Canada's use of the term in the emergency management framework established with its federal, provincial, and territorial emergency management

partners.[13] This framework defines resilience as:

> the capacity of a system, community or society to adapt to disturbances resulting from hazards by persevering, recuperating or changing to reach and maintain an acceptable level of functioning… Resilience minimizes vulnerability or susceptibility by creating or strengthening social and physical capacity in the human and built environment to cope with, adapt to, respond to, and recover and learn from disasters.

Public Safety also emphasizes that resilience is a "strengths-based construct" that focuses on assets, capabilities, and capacities. Adopting a broad approach, it argues that a resilient community is one in which members work together and utilize their strengths and capabilities to "absorb the impact of a disruption, to reorganize, change, and learn from the disruption."[14] The "building blocks" of a disaster-resilient community include the financial-economic, socio-political, and built capital to which a community has access,[15] with those best able to withstand and bounce back from a disaster having strong socioeconomic, physical, and psychological health, a diverse economy, effective health and social services, strong local government, sufficient access to education, and recognition of inequities around risk, vulnerability, and resilience within the population.[16] At a minimum, Norris and her colleagues note, "communities must develop economic resources, reduce risk and resource inequities, and attend conscientiously to their areas of greatest social vulnerability" to build collective resilience.[17] Likewise, the resiliency of physical infrastructure – power, water, adequate housing, shelters, community centres, roads, airports, etc. – is essential to assess a community's vulnerability to a disaster, as well as its "adaptive capacity" to recover from such an event.[18] The literature on community disaster resiliency focuses extensively on the development of human infrastructure/capital and capacity around hazard identification and mitigation, risk awareness, social capital (trust, social cohesion), planning and preparedness, effective communication, collective efficacy and empowerment, and emergency response training.[19]

> ***"In order to fulfill its purpose in an increasingly complex and rapidly evolving risk environment, the [Emergency Management] Strategy seeks to align the efforts of all Canadians as well as to strengthen overall resilience through five priority areas of activity…:***
>
> ***1. Enhance whole-of-society collaboration and governance to strengthen resilience;***
>
> ***2. Improve understanding of disaster risks in all sectors of society;***
>
> ***3. Increase focus on whole-of-society disaster prevention and mitigation activities;***
>
> ***4. Enhance disaster response capacity and coordination and foster the development of new capabilities; and***
>
> ***5. Strengthen recovery efforts by building back better to minimize the impacts of future disasters."***
>
> - Emergency Management Strategy for Canada: Toward a Resilient 2030, 9.

Scholars and practitioners agree that "the capacity to manage and respond to emergencies is best established from the bottom up through a 'whole-of-community' approach," which can "identify and address locally defined priorities, cultural values, and resource constraints."[20] Resilience flows from community members working together to improve relationships, networks, and social cohesion, to identify risks/hazards, to understand community capacity, and to mobilize assets when required. A resilient community will co-develop effective plans to identify and mitigate hazards, and make plans to prepare for, respond to, and recover from a disaster.[21] Members of resilient communities have access to appropriate training and equipment, and organizations involved in disaster and emergency response work together on plans and exercises, as well as coordinating and cooperating with relevant federal and provincial/territorial agencies.[22] Studies highlight the importance of effective local leadership and decision-making, with clearly established roles and responsibilities of various stakeholders, to tie together all of these efforts.[23]

Community resilience is tied to human empowerment. Public Safety Canada's Emergency Management Strategy advises that "resilient capacity is built through a process of empowering citizens,

responders, organizations, communities, governments, systems and society to share the responsibility to keep hazards from becoming disasters." Members of a resilient community are "empowered to use their existing skills, knowledge and resources to prevent/mitigate, prepare for, respond to and recover from disasters." They are educated on the risks that might affect their communities. Resilient communities have "champions" who will communicate the benefits of resilience to their fellow community members, encourage participation, and strengthen the bonds that already connect the community. Furthermore, "members of resilient communities are engaged in all aspects of community life, adopting a long term, holistic and community reflective perspective, influencing and making decisions that address the needs of their whole community. They take proactive steps today to help reduce risks tomorrow."[24]

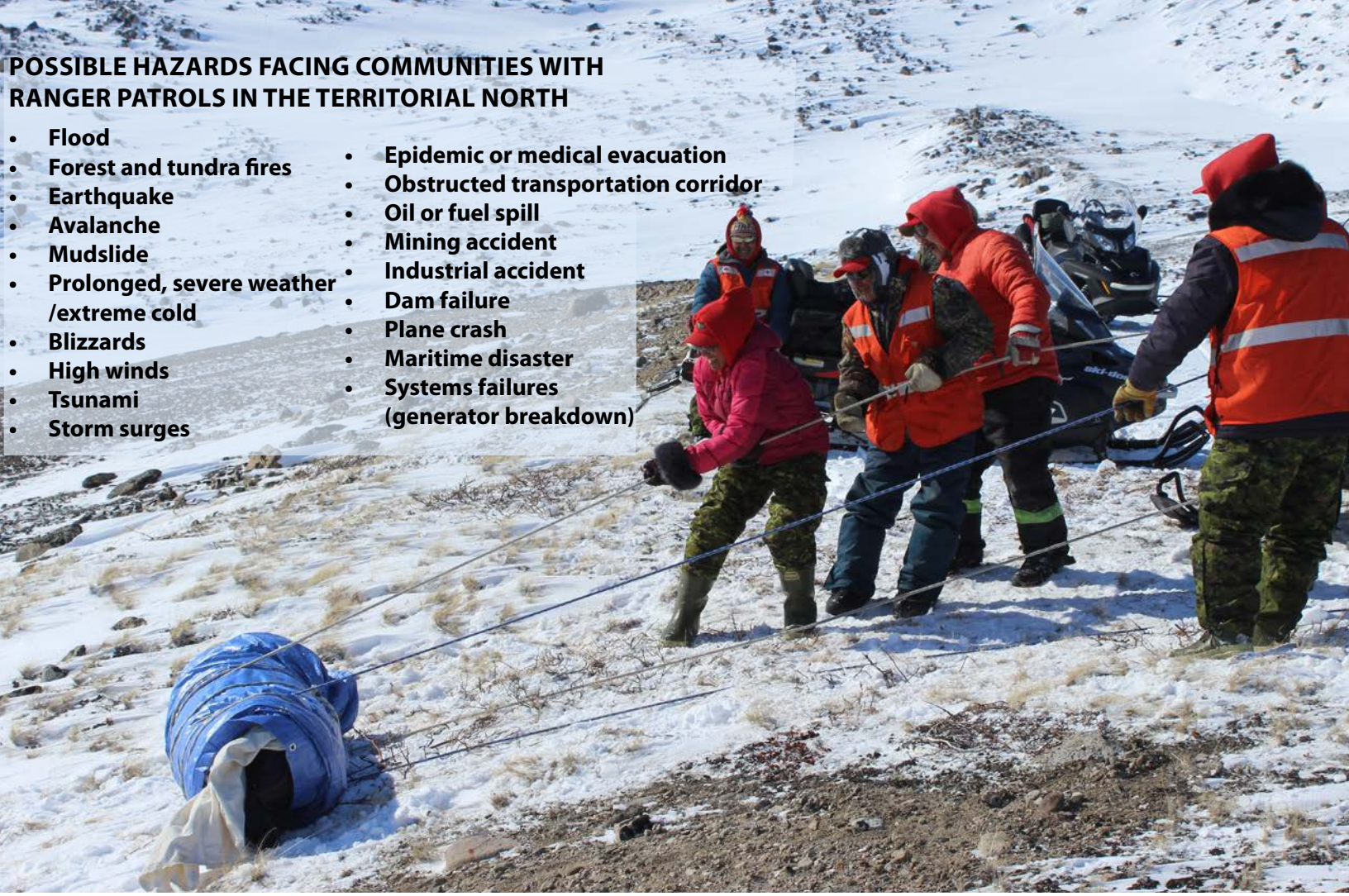
Government, scholars, and Indigenous communities have dedicated considerable effort to identifying the challenges and opportunities that Indigenous communities face when seeking to bolster their disaster resilience.[25] At a 2016 conference organized around the theme of "Building Resilience Through Reconciliation,"[26] one presenter emphasized how, "over the millennia, First Nations have built resilience through traditional learning and practices handed down by the Elders."[27] Traditional knowledge, social connections within Indigenous communities, and a spirit of self-reliance provide foundations upon which to enhance disaster resiliency.[28] Remoteness encourages independence but it also limits response capacity,[29] and participants highlighted the difficulties that remote Indigenous communities face when applying larger regional or national emergency response frameworks (such as CASARA or the Canadian Coast Guard Auxiliary) and in working with outside agencies with which they do not enjoy an established relationship rooted in trust.[30]

4.2 THE RANGERS AND COMMUNITY DISASTER RESILIENCE

The CAF provides Canadian Rangers with flexible training that is tailored to local terrain and environmental conditions and often relates directly and indirectly to emergency and disaster management capabilities. For example, First Aid, Wilderness First Aid, Ground Search and Rescue, austere airstrip construction on land and ice, and communication training all bolster individual and collective capacity at the community level to respond to exigencies. In their regular training, Ranger patrols are taught how to work together as a cohesive unit (a necessity during an emergency),[31] and training exercises sometimes involve patrols from multiple communities and other CAF personnel linking up to simulate a coordinated response to an emergency.

Rangers regularly partake in major domestic military exercises that mimic disasters and other emergency management scenarios. Over the past thirteen years, Operation NANOOK has simulated major oil spills, a petrochemical leak, ships in distress, air disasters, mass rescue operations, an earthquake, wildfires, evacuations, and pandemic response. During NANOOK 15, for example, Rangers from Fort Smith, NWT assisted in testing their community's wildfire response, practiced evacuating elders, and were taught how to FireSmart at risk areas (e.g. thinning out the forest and clearing deadfall).[32] In NANOOK 2016, Rangers in Yukon were involved in a scenario that simulated an earthquake hitting the territory.[33] A major objective of these exercises is to practice cooperation and collaboration between all of the partners involved in responding to these disasters, from the municipal to the federal level. Ranger participation in these exercises builds crisis management skills and experience working with outside organizations that they can leverage during actual emergencies. Ranger patrols also serve as platforms for the transmission of local and traditional knowledge and skills, such as how to identify natural hazards, reduce risks, and discern appropriate responses. Ranger Sergeant Roger Hitkolok, the patrol commander in Kugluktuk, Nunavut, explained that the mental processes involved in safely operating and surviving on the land also apply to other "hard" situations, such as emergencies and disasters. If an individual can function well travelling during a blizzard, they will be able to respond quickly and effectively if their community faces unexpected flooding or a power failure.[34]

The formal training provided to Rangers and the intergenerational transmission of knowledge



POSSIBLE HAZARDS FACING COMMUNITIES WITH RANGER PATROLS IN THE TERRITORIAL NORTH

- Flood
- Forest and tundra fires
- Earthquake
- Avalanche
- Mudslide
- Prolonged, severe weather /extreme cold
- Blizzards
- High winds
- Tsunami
- Storm surges
- Epidemic or medical evacuation
- Obstructed transportation corridor
- Oil or fuel spill
- Mining accident
- Industrial accident
- Dam failure
- Plane crash
- Maritime disaster
- Systems failures (generator breakdown)

that occurs amongst Rangers within patrols effectively address several gaps identified with disaster risk reduction in Canadian Indigenous communities, particularly around the need to create space for traditional knowledge and practices in these efforts.[35] Ranger patrols also provide a platform to support efforts by Indigenous communities to develop local emergency response capabilities and work with outside agencies.

4.3 PLANNING, PREPAREDNESS, AND HAZARD-RISK ANALYSIS

In order for community-based organizations involved in disaster management to be effective, their capabilities and responsibilities should be clearly reflected in community emergency plans.[36] While not uniform across the three territories, Ranger roles are defined in certain territorial emergency frameworks and in the local plans of several communities. The Northwest Territories Hazard Identification Risk Analysis, for example, highlights the locations of Ranger patrols in the territory.[37] In Yukon, the Village of Teslin's emergency plans include the community's Ranger patrol as a resource.[38] Dawson's emergency plan provides the Rangers with a larger role, listing them as members of the Municipal Support Group (MSG) that will advise and assist the mayor and Civil Emergency Measures Commissions by collecting and disseminating information. The emergency plan also gives the Ranger patrol a rescue role during major incidents by helping to remove people from danger, providing medical treatment, establishing emergency health facilities, shelters, and refreshment centres, and transporting injured persons to medical facilities.[39] In the NWT, the emergency plan for the Town of Fort Smith places members of the Ranger patrol on the Emergency Response Advisory Group, which will action requests given to it by the mayor.[40] The Town of Hay River's Emergency Plan notes that the Rangers can provide "support for searches, assist in dissemination of emergency notices, [and] assist in the transport of residents in evacuation." The town's plan also gives the Rangers a role on the

Flood Watch Committee, which monitors "changing breakup or flooding conditions to maintain situational awareness," provides early warning to residents, and helps to protect private property and critical infrastructure.[41]

Indicator of Success: The Canadian Rangers are written into the community emergency plan and/or are aware of how they might be engaged as a group to serve as first responders in an emergency or disaster.

The Hay River Ranger Patrol's participation in the town's Flood Watch Committee reflects the contributions that Rangers can make to hazard risk analysis, prevention, and mitigation efforts. As the "eyes and ears" of the military and their communities, Rangers watch for potential natural hazards, such as dangerous wildfire conditions or ice and water levels in nearby river systems. A Ranger from Cambridge Bay, Nunavut explained that when going out on the land on official patrol duties or as an individual, he is constantly keeping an eye out for potential hazards. "[It is] important to get out of the community and report on the changes," he noted, "because there are a lot of changes happening, and people need to hear about them." Some Ranger patrols use their monthly meetings to conduct informal hazard risk analyses by discussing what they have seen on the land and what might pose a risk to their communities.[42] By identifying hazards early, Rangers can play a part in preventing and mitigating possible dangers to their community.

Simply knowing the local resources which communities can access and relaying this information to relevant local and external agencies is integral to disaster preparedness and response. Given how well Rangers know their communities, they are well placed to execute whole-of-community resource mapping to identify capacity, strengths, and deficits.[43] In the past, Ranger patrols have been asked to provide updates to Local Area Resource Reports (LARR), which catalogue essential information about local infrastructure and community assets that could be used in disaster response. Contact information for patrol leadership is also often visible in RCMP detachments, and police in some communities regularly turn to the Rangers for local information and contacts.

Metric of Success: Rangers are involved in prevention and preparedness through hazard identification and mitigation of vulnerabilities in their local area/region, and the provision of updates on area resources and assets that are shared with key community, regional, and federal stakeholders.

4.4 LEADERSHIP, RELATIONSHIPS, AND NETWORKS

Strong formal organization and leadership, which delegates responsibilities and tasks in an expedient manner, are key enablers during an emergency.[44] Focus group participants emphasized that the Ranger organization provides important opportunities and space to develop a deep pool of leaders at the local level. Ranger patrols can identify potential leaders amongst their ranks, provide opportunity to develop their leadership skills, and encourage them to take on leadership roles. Ranger sergeants and elders in patrols often mentor younger members, encouraging them to become corporals and take on greater responsibilities.[45]

The CAF also provides Ranger sergeants and master corporals with annual leadership training that offers suggestions on how to organize, plan, coordinate, and solve problems more effectively. "All of these guys are very good Rangers, but it takes a special kind of training and a special kind of thinking to be an effective Ranger leader," Warrant Officer Craig Routery explained. "You have to learn to think beyond yourself as a leader, and that's the aspect we were trying to get out of the Rangers we brought in for the training." Ranger leadership training is highly practical – generally a task is given out and participants are taught how to break it down into its component parts. They are taught how "to solve the parts, delegate some of the work to other people, how to supervise and pull it all together to have everyone meet the same objective."[46] This training also teaches participants how to keep a patrol motivated, organized, and focused, and how to coordinate and cooperate with other members and units of the CAF.[47] By bringing together Rangers from different communities, leadership meetings also allow the Rangers, as subject matter experts, to share best practices that are relevant when orchestrating responses to emergencies and disasters.

Some Ranger leadership training is specifically directed at bolstering emergency response. In January 2017, Ranger patrol leaders exercised a mock scenario involving a satellite re-entry that threatened a Northern community, including planning, geographical analysis for the positioning of observation points, and preparations for mass medical evacuations. After the exercise, Sergeant Titus Allooloo of Pond Inlet highlighted that "Ranger training helps remote Arctic communities build their ability to provide emergency response, by honing existing skill sets of Northerners" – an essential element of which is effective leadership.[48]

Ranger patrols consist of individuals who are part of relationships, groups, and networks that span the social breadth of their communities. "Rangers wear a lot of hats," one patrol member from Kugluktuk explained. "We are in local government, hunter and trappers' organizations, Coast Guard Auxiliary units, housing associations. We are coaches. We volunteer at community events. We have coffee with elders. We go to church. We run bingo. We work with a lot of different people."[49] At the same time, Ranger patrols foster new relationships and associations between members, ultimately forming a nexus that a community can draw upon during an emergency or disaster. The intersection of multiple social networks in a patrol ensures that its members know most or all community members, understand who is vulnerable, and who needs assistance (hence their prominent role in performing wellness checks during emergencies). When outside agencies respond to local emergencies and disasters, Ranger patrols provide a ready entry point into the community and offer immediate access to extensive networks, all of which facilitate response activities.

Many remote Canadian communities have had a Ranger patrol for decades, and the reputation that Rangers have earned for their positive community contributions provides new patrols with a high degree of trust and respect. This trust also flows from their respect for and understanding of local cultural norms (which they actively work to strengthen) and their fluency in Indigenous languages – an important asset during emergency scenarios.

The organization of the Rangers into patrols at the community level ensures that they can respond as a group almost immediately. When a massive snowstorm drove people from their homes in Pangnirtung, Nunavut in February 2003, for example, Rangers worked with the RCMP and volunteer firefighters to shuttle people to school gymnasiums. Given that most

"RANGERS ARE THE EYES AND EARS OF THE MILITARY AND OF THE PEOPLE… WE PROTECT OUR COMMUNITIES."
- Canadian Ranger, Taloyoak Patrol, 15 April 2019.

"GOING OUT WITH THE RANGERS, WHETHER IT BE FOR ANNUAL TRAINING, OR TO CHECK THE DEW LINE SITES, LETS US GET OUT OF THE COMMUNITY AND REPORT ON THE CHANGES, BECAUSE THERE ARE A LOT OF CHANGES HAPPENING, AND PEOPLE NEED TO HEAR ABOUT THEM."
- Canadian Ranger, Cambridge Bay Patrol, 18 April 2019.

"WE NEED TO FIND OUT WHAT WE CAN DO [IN AN EMERGENCY]. WE NEED TO TALK ABOUT IT. WE NEED TO PLAN THIS OUT AND TRAIN. SOMETHING WILL HAPPEN…WE NEED TO BE READY, WE NEED TO TALK ABOUT IT."
- Canadian Ranger, Kugluktuk Patrol, 23 April 2019.

communities in 1 CRPG rely on diesel generators for power, their failure for extended periods in the winter can pose a serious risk to human life. In May 2000, a fire destroyed the power plant in Sanikiluaq, leading the Government of Nunavut to declare its first state of emergency in the community. During this crisis, local Rangers and Junior Rangers "came to the rescue," performing wellness checks and assisting elders. The Pangnirtung Canadian Ranger Patrol also responded when a fire knocked out their community's power plant in 2015, liaising with the hamlet's emergency response control group. Over the course of the crisis, they helped to set up an emergency shelter, served dinner to elders, performed door-to-door wellness checks, ensured that community members had access to heat sources, and informed residents about potential dangers such as the carbon monoxide poisoning that could result from using camping stoves indoors.[50] "The way the community of Pangnirtung pulled together during this emergency was truly admirable," Nunavut Premier Peter Taptuna noted in praising the Rangers and other community organizations involved in the response. "You embody the principle of a strong

and resilient community. The response to this situation could not have gone more smoothly."[51]

Although various Ranger patrols in 1 CRPG have participated in whole of government exercises practicing community evacuations, they have yet to participate in a real large-scale evacuation. In May 2020, however, members of the Hay River patrol supported the evacuation of 300 of the town's residents in the face of possible flooding, setting up checkpoints, directing people to the registration point, and ensuring that community members kept away from the evacuation area.[52] As climate change exacerbates the natural hazards that threaten many of Canada's remote and isolated communities,[53] the Ranger role in community evacuation might expand, along the lines of those executed annually by 3 CRPG.

Although beyond the scope of this study on 1 CRPG, Canadian Rangers in Northern Ontario regularly play pivotal roles in community evacuations as part of Operation LENTUS (the CAF's standing operation to provide assistance and respond to natural disasters through domestic relief operations). Similar scenarios could occur in the Canadian territories, and the importance of Canadian Rangers in evacuating remote Indigenous communities should not be underestimated. Research by scholars and the 2018 Report of the Standing Committee on Indigenous and Northern Affairs on fire safety and emergency management in Indigenous communities elucidates some challenges and issues involved in the evacuation of isolated communities. Government evacuation efforts have been criticized as poorly conceptualized and executed at every stage: from initial communication of an evacuation order (sometimes hampered by poor connectivity in remote communities), to coordination and execution on the ground, to the placement of evacuees in temporary facilities or host communities, to the process of returning evacuees to their communities. Indigenous community members have highlighted the lack of translation services, medical care, and mental health supports, as well as the absence of clear official lines of communication to voice emerging needs and concerns during evacuations. They have also identified problems around the initial registration of evacuees and their specific needs, the transportation of people to evacuation sites, and the general lack of capacity building in communities for evacuations prior to a disaster or emergency.[54] Canadian Rangers have offered solutions to many of these issues when they have been involved in evacuation procedures, serving as conduits between their communities and the government agencies involved, providing translation services, performing door-to-door wellness checks, registering and transporting evacuees, supporting evacuees in host communities, and remaining behind to conduct continuous safety and security patrols in their home communities.

Metric of Success: Canadian Rangers patrols are prepared to support a whole of community response to an emergency or disaster, including established relationships with other organizations and the hamlet office.

4.5 MASS CASUALTY EVENTS AND MASS RESCUE OPERATIONS (MRO)

1 CRPG earned a Canadian Forces' Unit Commendation for the role that Rangers played in the response to the crash of First Air Flight 6560 on 20 August 2011. After the crash, Rangers guarded the site continuously and provided predator control as polar bears were drawn to the smell of rotting food from the plane. Ranger Kevin Lafferty reflected that, "to switch gears so quickly for something so obviously so tragic, wasn't the easiest thing … [There were] a lot of sleepless nights initially, as everybody tried to get a handle on what had actually happened. Everybody did their job, their duty."[55] Rangers have also responded to smaller-scale plane crashes in the NWT. In January 2019, they responded to the crash of an Air Tindi King Air 200 aircraft outside Wha Ti, which claimed the lives of two pilots. The forced landing of a Buffalo Airways plane 169 km from the Hay River airport runway in May 2019 also necessitated a Ranger response. Working with fire crews and the RCMP, members of the Hay River Ranger Patrol rushed to the crash site and helped to retrieve two people with their ATVs.[56] Together, these plane crashes illustrate the risk of mass casualty events in the Canadian North and the Ranger role in responding to them.

An expanding marine tourism industry (presuming that it rebounds from the effects of COVID-19) and increased vessel traffic associated with

Arctic resource development heightens the risk of human-made disasters and maritime Mass Rescue Operations (MRO). The International Maritime Organization (IMO) defines an MRO as "an immediate response to a large number of persons in distress so that the capabilities normally available for search and rescue authorities are inadequate." Responses to such rescues generally demand "immediate, well-planned and closely coordinated large-scale actions and use of resources from multiple organizations."[57] Research highlights the benefits of involving local stakeholders and community organizations in the planning, exercise, and execution of MROs given their expert knowledge of local geography, conditions, and capabilities.[58] In the last three decades, several marine incidents involving cruise ships in Canada's Arctic waters could necessitate such operations had conditions changed. Notable examples include MV *Clipper Adventurer* (2010) and *Akademik Ioffe* (2018), both of which ran aground in Nunavut's Kitikmeot Region. In both situations good sea and weather conditions prevailed, which allowed passengers to be successfully offloaded.

During our focus groups, interviews, and the 2020 Kitikmeot Roundtable on Search and Rescue, Rangers saw a role for their patrols in responding to MROs. One Ranger from Cambridge Bay explained that "if a major emergency happened, like if a cruise ship ran aground, people would come from the community to help. That's just the way it is up here. I guess it would be helpful to know how we could help. So, if we go out as Rangers, what could we do? Maybe not a lot, but something. People are going to go out anyway, can't we get some direction on how we might be able to help the most? I think that the Rangers would have something to contribute." Rangers view themselves as valuable force multipliers in a potential MRO and want to know how their training, equipment, and organization be used in this kind of emergency.[59] Another Ranger explained that, as the "eyes and ears" of the military in the North, the Rangers should be deployed whenever a ship is in danger and calls for assistance so that they can provide information to 1 CRPG, which can share it with the rest of the CAF and the Canadian Coast Guard. Rangers are also the eyes and ears of their communities, leading several participants in the Kitikmeot Roundtable on SAR to explain that they would go out to check on the vessel to make sure that there was no environmental pollution or dangers to their community, regardless of whether 1 CRPG officially tasked them to do so as Rangers.

The Kitikmeot Roundtable on SAR concluded that community groups would have essential and diverse roles to play in an MRO. Participants listed a series of potential responses for Ranger patrols, Coast Guard Auxiliary units, and/or community GSAR teams:

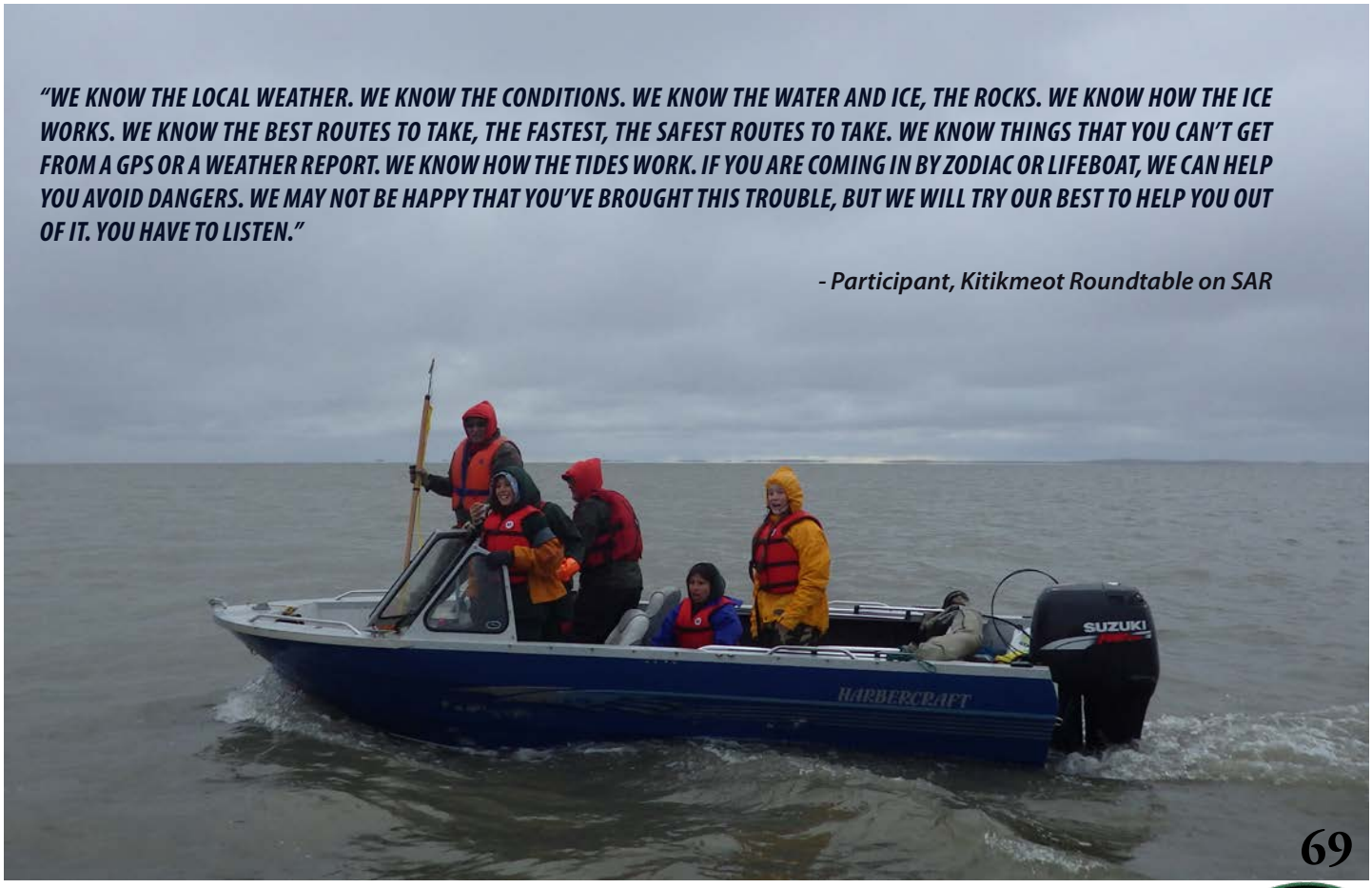
- put eyes on the situation;
- provide updates to the Joint Rescue Coordination Centre (JRCC);
- act as the on-scene coordinator;
- provide intelligence on where passengers could be evacuated to on the land;
- shepherd lifeboats or zodiacs to safe havens or to the community;
- conduct shoreline searches if any passengers are missing;
- help in offloading and tracking passengers – both on the land or in communities;
- search for missing passengers;
- establish a camp to provide warmth and shelter;
- give first aid;
- distribute blankets, warm clothes, and rations;
- provide predator control;
- reassure evacuees that the situation is under control;
- assist in setting up accommodations for evacuees in their communities; and
- serve as points of contact between evacuees and the community.

Metric of Success: Rangers are prepared to assist with mass rescue operations, mass casualty events, and community evacuations, and have contact with nearby communities in case they have to work together in case of emergency.

4.6 SEARCH AND RESCUE

Canadian Rangers in 1 CRPG play an important role in supporting community SAR operations across the North – during official taskings for which they are paid, and more frequently as members of community GSAR teams or Coast Guard Auxiliary units. This service is essential – the loss of a hunting party or family can be disastrous to the general health and well-being of a small community – and Rangers are celebrated across the North for their involvement. When asked how Fort Resolution viewed the Rangers and their work, MCpl Dollie Simon explained: "My community is especially aware of the Rangers' search and rescue skills… My Ranger unit will usually do two searches a year. We have been very fortunate that this number is so small. Mainly, it is not because people are lost but because they have equipment problems like a broken-down Ski-Doo."[60]

In conversations during our outreach activities in the Kitikmeot, Rangers often emphasized how they use the training, organization, and equipment provided to them during searches whether as Rangers or as volunteers with community-based SAR organizations. A SAR operation conducted by Sgt. Hitkolok in Kugluktuk serves as a clear example of the practical benefits of Ranger skills and training. One November, when it was dark and the ice was still thin, a lone hunter went missing. He had no GPS or SPOT device with him, and he had told no one where he planned to go hunting. Hitkolok gathered Kugluktuk's GSAR team and together they drew upon their knowledge of the land, ice, and hunting grounds to figure out where to look. They figured the man had gone seal hunting along the coast towards High Lake and Bathurst Inlet. Hitkolok and Jack Himiak led a small team of GSAR volunteers down the coast. After 130 miles of travel in terrible weather and treacherous ice conditions, they finally spotted the hunter's snowmachine. The man had shot a seal and went to retrieve it on his snowmachine, only to hit some rough ice, fall off, and hit his head. This left him disoriented and confused. Using his first aid training, Sgt. Hitkolok provided medical assistance to the injured and near-hypothermic man. Using his Ranger-issued satellite phone, Hitkolok



"WE KNOW THE LOCAL WEATHER. WE KNOW THE CONDITIONS. WE KNOW THE WATER AND ICE, THE ROCKS. WE KNOW HOW THE ICE WORKS. WE KNOW THE BEST ROUTES TO TAKE, THE FASTEST, THE SAFEST ROUTES TO TAKE. WE KNOW THINGS THAT YOU CAN'T GET FROM A GPS OR A WEATHER REPORT. WE KNOW HOW THE TIDES WORK. IF YOU ARE COMING IN BY ZODIAC OR LIFEBOAT, WE CAN HELP YOU AVOID DANGERS. WE MAY NOT BE HAPPY THAT YOU'VE BROUGHT THIS TROUBLE, BUT WE WILL TRY OUR BEST TO HELP YOU OUT OF IT. YOU HAVE TO LISTEN."

- Participant, Kitikmeot Roundtable on SAR

reported his position and requested a Twin Otter from 440 Squadron in Yellowknife to evacuate the hunter. Next, he used his Ranger training to instruct his GSAR team on how to prepare an ice strip for the Twin Otter. The team filled pots, pans, and plates with whatever they could light on fire to illuminate the strip. The Twin Otter landed on the austere landing strip that the GSAR team had made on the ice and the man was successfully evacuated. As Sgt. Hitkolok casually concluded, "It was a hard one." To make these kinds of rescues possible, Ranger focus group participants emphasized the desire for more GSAR training and exercises at the patrol level as part of Type 1 Ranger exercises.

Metric of Success: Rangers receive navigation, first aid, and other forms of training that they can apply to Search and Rescue. Certain types of SAR-related training should also be planned and scheduled in consultation with other territorial and local first responder organizations to create synergies and economies of effort and costs where possible.

When searches go on for extended periods, the search area is too vast to be covered by volunteer GSAR teams, and/or there are insufficient community volunteers, Ranger patrols can offer an accessible community-based solution. Feedback that we received from Rangers, other community SAR practitioners, and hamlet office officials, however, stressed the perceived difficulties around activating patrols for SAR operations. As a Ranger participant at the Kitikmeot Roundtable on Search and Rescue observed:

> The Taloyoak Ranger Patrol has taken part in many SAR operations around the community, with Kugaaruk, and Gjoa Haven. Rangers are called up when there are not enough volunteers or the search goes long. They should be involved in SAR discussions. Sometimes it takes too long for the Rangers to be activated in SAR situations. It is a very confusing process and sometimes people don't seem to know how it works. This slows everything down and when someone's life is in danger, it doesn't make sense. The Rangers can make a big difference in search and rescue. We are organized and trained. We know how to work together. It should be made easier to use us.

This is a longstanding idea. In 1978, Major Ron McConnell suggested that Rangers could play a stronger role in ground search and rescue. Every year, the RCMP failed to find lost Northerners because of insufficient resources for sustained searches. Rangers seemed a natural solution: they lived on the land and received navigation and basic first aid training. Many Rangers also belonged to hunters and trappers' associations, which assisted in local ground searches in the North. But the RCMP, not the military, had primary responsibility to coordinate and undertake searches, which created legal obstacles. Local RCMP constables could not call out the Rangers directly and required official approval from DND before doing so. In practice, few experienced community members waited for an official tasking before heading out on the land or waters to find someone who was lost. Rangers therefore routinely participated in searches, rescues, and recoveries as unpaid, civilian volunteers rather than as Rangers on official duty.[61] Since that time, Rangers have continued to conduct SAR both with their "hats on forward" (on official taskings where they are paid and covered as on-duty CAF members in case of injury) and with "their hats on backwards" (unofficially, but drawing upon their Ranger training and organization).[62] This distinction continues to confuse some Rangers.

Despite frequent government reports calling for enhancements to the SAR system in the North and DND commitments to support other government departments and agencies in fulfilling their mandates, Ranger support to GSAR has been plagued for decades by an overly bureaucratic process through which a Territorial Emergency Measures Organization (EMO) or the RCMP request 1 CRPG's assistance to support a local GSAR. In the past, RCMP officials in the NWT even explained a reluctance to make a formal Request for Assistance (RFA) to call out the Rangers formally because they feared that DND would seek to recover costs. One Ranger from the Dehcho region emphasized in 2016 that 1 CRPG Headquarters should have more control to get Rangers out on GSAR. "That is what we are trained for," he highlighted. "To get us out

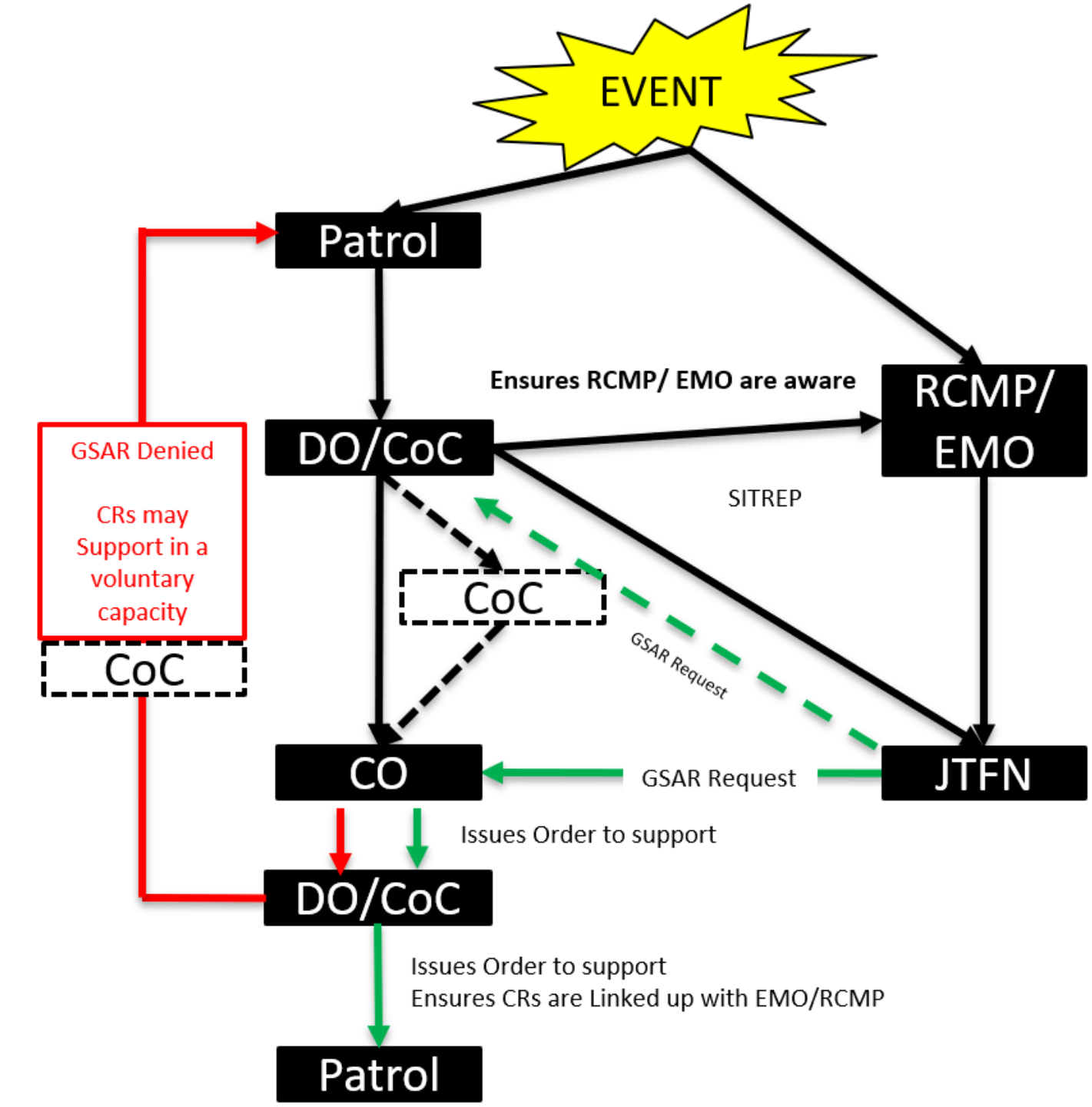


FIGURE 4-1: *Flow Chart for Activation of Rangers for Ground Search and Rescue in 1 CRPG*

around our communities. This is better for our communities and our country." His community, which did not have a volunteer SAR association, talked of setting one up – with the stipulation that the people involved either are Rangers or receive Ranger training.[63]

In other cases, Rangers are closely connected to (or almost synonymous with) local GSAR organizations. "We [Rangers] are the people to call when things go sideways – period," one Ranger explained. In Yukon, Rangers are separate from SAR but Ranger training and Rangers' knowledge of the land means that the Rangers are "called for everything" from flood rescue to rope rescue in the mountains. In some communities, "almost all the Rangers are also local SAR." In Atlin, BC, the Rangers and the community's strong SAR group are "one in the same" because the GSAR team is comprised of Rangers. If the Rangers were not there, the loss of leadership would make SAR "chaotic" and searchers would take much longer to organize and execute. Because the local RCMP has a trust relationship with the Rangers, there is a high degree of respect for what the Rangers bring to the table.[64]

Recent efforts to clarify and streamline the process to activate Ranger patrols for GSAR taskings, and to differentiate between short-term and longer-term SAR responses, are an important step in improving Ranger understanding and allowing Ranger patrols to mobilize and launch more efficiently as first responders. When the patrol contacts 1 CRPG headquarters and the Commanding Officer (CO) is convinced that immediate assistance is required, the CO has been delegated the authority to approve up to twenty-four hours of assistance by up to eight Rangers (including pay, EUR, fuel, and food). (The CO can also invoke this mechanism for "recovery" operations when the community needs Ranger assistance and the patrol has the capability to do what is requested.) Activating a Ranger patrol for longer or larger SAR operations requires a formal request from the local RCMP and Territorial EMO, through Joint Task Force (North) and/or the CAF JRCC in Trenton, which formally requests 1 CRPG assistance.[65] Continued efforts to clarify when and how the Rangers are activated, how their training as Rangers fits with that provided by other SAR organizations, and under what conditions they and their property are protected while

on searches is important to sustaining trust, coordinating and leveraging local resources, and building practical capacity.

Metric of Success: Rangers understand and follow search and rescue (SAR) activation and control procedures established by 1 CRPG in coordination with territorial emergency management organizations (EMOs) and Joint Task Force (North) (JTFN).[66]

4.7 RANGERS AND PANDEMIC RESPONSE

The Rangers have performed various roles in supporting human health and security in Northern communities that are particularly vulnerable and exposed to natural hazards, including pandemics, over the past decade. During NANOOK exercises, Rangers have participated in scenarios with other first responders to discern how they can best work together to deal with the outbreak of an infectious disease. They have also helped health professionals to meet public health needs in real-life situations. During Nunavut's two-week mass vaccination program against swine flu (the H1N1 virus) in November 2009, Rangers played a pivotal role guiding Nunavummiut through the process and helping them fill out paperwork. *Nunatsiaq News* editor Jim Bell noted that, alongside health workers, the Rangers "achieved something that most other governments in the country have fumbled so far ... They managed to conduct a mass flu-shot clinic that worked."[67]

The widespread activation of the Canadian Rangers in response to the 2020 coronavirus (COVID-19) global pandemic is unprecedented. Under Operation LASER, hundreds of Rangers have been employed on full-time Class C service in remote and isolated communities across Canada as part of an integrated CAF response. Contracts began as early as 5 April 2020 and continued until end of August. When announcing the plans on 30 March, Minister of National Defence Harjit Sajjan explained that "these flexible teams are capable of operating as local response forces to assist with humanitarian support, wellness checks, natural disaster response and other tasks as required. Canadian Ranger patrols will be available to enhance our understanding of the needs of the northern, remote and Indigenous communities, and we will be ready to respond as required."

The Rangers' activation fits within this broader whole of government approach. Placing Rangers on full-time service to support their communities showed a tangible commitment that the federal government is looking out for Northerners' needs and leveraging existing community resilience and capacity. Follow-up work should be directed to systematically assessing how the Rangers perceived their roles and the ways that they were employed; how their contributions were perceived by medical authorities and other stakeholders; and how other community members perceived their service.

Although Rangers are not trained in primary health care delivery, preliminary evidence suggests that they have proven well positioned to support those who are. They know their communities, who is most vulnerable, and where support and assistance might be required. Their myriad roles and tasks include:

- conducting wellness checks
- establishing community response centres and establishing triage points to facilitate the work of healthcare personnel
- setting up remote COVID testing centres to facilitate triage
- delivering essential personal protective equipment and goods
- providing detailed information on COVID-19 precautions, including social distancing and handwashing
- delivering prescription medication to people in need
- providing food (including fresh game and fish) and supplies to elders and vulnerable community members
- clearing snow
- cutting and delivering firewood
- helping to unload and distribute freight from aircraft
- helping to screen air passengers
- conducting bear patrols
- harvesting and distributing traditional medicine
- monitoring the health and well-being of Junior Canadian Rangers and other community youth, and providing activities in which they could participate
- crafting masks
- serving as translators, and acting as a conduit between their communities and

the government agencies involved in responding to potential community outbreaks
- gathering data and statistics on the current state of the community relative to pandemic relief efforts

Future access to additional information will further reveal how COVID-19 has exposed and in many cases exacerbated stresses, gaps, and vulnerabilities in isolated communities.[68]

During the COVID-19 pandemic, Rangers across Canada have continued to safeguard their communities in more traditional roles, including flood preparedness and relief operations, ground search and rescue, and fire watch. These activities demonstrate the Rangers' ability to conduct concurrent missions, as well as their utility as a community-based Reserve force that prepares and provides essential humanitarian assistance to vulnerable populations in Canada so that other CAF assets can be directed elsewhere.

Preliminary evidence from Operation LASER affirms that the Rangers are a strong example of how DND/CAF relationships can effectively build disaster resilience in at-risk, remote, and isolated communities with small populations, limited infrastructure and local resources, and little access to rapid external assistance. 1 CRPG and the Canadian Army should make a dedicated effort to consolidate lessons learned and best practices that might be applied in future public health missions and other emergency situations. This work must be conducted by analysts with a deep understanding of the unique challenges and constraints facing isolated Northern and coastal communities, Indigenous peoples, and the Ranger organization. Measures of effectiveness or "success" in other parts of the country may not be applicable or appropriate to 1 CRPG or in the context of Canada's Northern Territories.

Metric of Success: Rangers are trained and prepared to assist their communities and public health agencies in response to a pandemic or other large-scale health emergency.

Measuring the Success of the Canadian Rangers

NAUJAAT

THE CANADIAN RANGERS AND COMMUNITY RESILIENCE

PETER KIKKERT AND P. WHITNEY LACKENBAUER

Preparing for disaster and emergency response and search and rescue ties to community resilience more broadly. In August 2017, for example, twenty-one Rangers from the Naujaat patrol completed a Type 1 patrol with Ranger Instructor Sgt. Frank Monaghan that included a mock search and rescue exercise. "We trained to improve our communication abilities and search by boat in a scenario of a couple of guys who had an accident while out on the land," Ranger Sgt. Oscar Kringayark described. "After locating them we had to administer first aid and arrange to have them safely transported." The patrol commander lauded how the exercise "really improved the overall skill level of our patrol." During the exercise, elder David Nuluk, who is one of the Rangers, also taught everyone in the patrol "how to make rope out of a bearded seal. It was pretty awesome to watch and a lot of the young guys were really tuned into that." At the end of the ten-day exercise, the patrol held a special parade to honour the late David Tuktudjuk, who had served as a Ranger for decades. At this event, which was heavily attended by other community members, the patrol presented a medal and certificate to David's widow, Mary Tuktudjuk, to celebrate his long and distinguished career as a Ranger and his status as a "highly-respected elder within our group and the local community."[1] Training as first responders, learning local and traditional knowledge, and contributing to the community are all core components of Ranger service.

The Ranger organization actively builds many of the characteristics associated with community resilience in direct and indirect ways. The third pillar of the Ranger task list ("maintain a Canadian Forces Presence in the local community") acknowledges that a Ranger patrol provides a natural platform upon which to identify and discuss local needs and priorities, and to design solutions. In so doing, patrols bolster the self-reliance and adaptive capacity of their communities. Furthermore, the "Rangers remain an essential bridge between northern

peoples, the military, and the federal government more generally—an essential liaison role that ensures that as the CAF expands its footprint in the North it does not crush local communities."[2]

Rangers' ability to identify issues, their training, and a sense of social responsibility make them significant community leaders. Through their leadership, initiatives, and presence, Ranger patrols contribute to the social capital (networks), pride, sense of purpose, spirit of mutual assistance and cooperation, people-place connections, and attachment to community that animate their home communities. The Rangers also provide opportunities for learning, knowledge sharing, and problem solving, and the development of human infrastructure and community resources. They make these contributions in their official capacity as Rangers, as well as through their actions as community members who draw upon their Ranger training and networks in their everyday lives.

Metric of Success: The Ranger patrol functions as a social network in the community that fosters a sense of community, feelings of belonging and pride, and generating shared values and norms.

5.1 DEFINITIONS AND KEY THEMES

Community resilience can be defined as the "ability of a community to cope and adjust to stresses caused by social, political, and environmental change and to engage community resources to overcome adversity and take advantage of opportunities in response to change."[3] Within this definition, community resilience is focused on navigating continuous change, ongoing disruptive processes, and a socio-ecological environment characterized by "uncertainty, unpredictably, and surprise." Leadership scholar Kristen Magis explains that community resilience flows from the "existence, development and engagement of community resources by community members to thrive" in the midst of these changes and disruptions.[4] It is about taking deliberate collective action, and drawing upon the social and cultural networks that define a community, to determine the trends of change, understand vulnerabilities, and utilize resources to sustain well-being and/or facilitate adaptation. Helene Amundsen explains that "the concept is analytically useful because it captures the collective dimension and the dynamic properties of the way in which communities are adapting to changes."[5]

These approaches to community resilience align with the *Arctic Council's Arctic Resilience Report* definition: "the capacity of people to learn, share and make use of their knowledge of social and ecological interactions and feedbacks, to deliberately and effectively engage in shaping adaptive or transformative social-ecological change" and "the capacity to buffer and adapt to stress and shocks, and thus navigate and even shape change."[6] This broad definition is geared towards dealing with the multitude of rapid changes and challenges confronting Arctic states and their residents. These changes include climate change, resource development, pressures on cultural traditions, externally imposed measures, and governance challenges. The Community Well-Being Index, produced by Indigenous Services Canada, provides metrics on how First Nations, Inuit, and non-Indigenous communities across the Canadian North compare to regional and national averages. This data reveals the challenges that these communities face owing to remoteness, lack of human capacity, inadequate infrastructure and services, and limited economic diversity. Depopulation remains an ongoing concern for many of these communities, as do the high costs of living and food (in)security.[7]

The Canadian Centre for Community Renewal's community resilience guide for rural recovery and renewal defines a resilient community as "one that takes intentional action to enhance the personal and collective capacity of its citizens and institutions to respond to, and influence the course of social and economic change." Resilience is not a "fixed quality within communities" but a "quality that can be developed and strengthened over time." As a community becomes more resilient, it is better able to "intentionally mobilize its people and resources to respond to" change.[8]

While there is ongoing debate about the building blocks of community resilience, several overarching themes stand out. In an environment defined by change, adaptive capacity, self-reliance, and flexibility are of utmost importance. Studies focus heavily on the economic, environmental, and social capital available to a

community, including the existence of robust community infrastructure, effective services, diverse economies, healthy families and child development, and a strong attachment between people and place.[9] The concept of social capital includes social connectedness and cohesion, shared norms, values, beliefs, and identity, a strong sense of trust, civic participation, and the ability to take collective action.[10] Resilient communities consist of members who have a positive outlook and who are willing to help one another.[11] Scholars emphasize the identification and mobilization of community resources and individual and group capacities/strengths, the establishment of strong community networks, the fostering of local leadership (including amongst youth) and collaborative governance, and the creation of platforms for listening and sharing.[12] Effective, engaged, and active community organizations are also essential to community resilience, as are the links between these groups and their relationships with higher levels of government and outside organizations.[13]

Resilience-building initiatives in a Northern context also highlight these variables. The Arctic Council's framework for resilience stresses the need to empower local communities through improved education and learning opportunities, support for local organization and decision-making, the training of community leaders, and use of Indigenous knowledge.[14] Inuvialuit Regional Corporation chair Duane Smith reiterated many of these recommendations in articulating factors that "make certain individuals and communities more resilient to change." These include adaptability, the ability to efficiently utilize local resources and knowledge, local "ownership of preparation, planning, and response," and "trust and cooperation between public and private agencies and community members."[15]

Long-term studies on resilience indicate that the most important attributes of a resilient community are social networks and community togetherness. Social networks – whether focused on family, friends, or broader community organizations – are foundational because they build a sense of community, a feeling of belonging and pride, a shared identity, and foster a spirit of support, cooperation, and mutual assistance. These studies also highlight:

- The importance of leadership, which can be formal (municipal government) or informal (through small group action), and should be diverse and representative of the community;
- A positive outlook – in particular determination, perseverance, humour, a willingness to adapt, the ability to cope, and optimism about the future;
- Consistent and ongoing formal and informal learning and knowledge transmission opportunities;

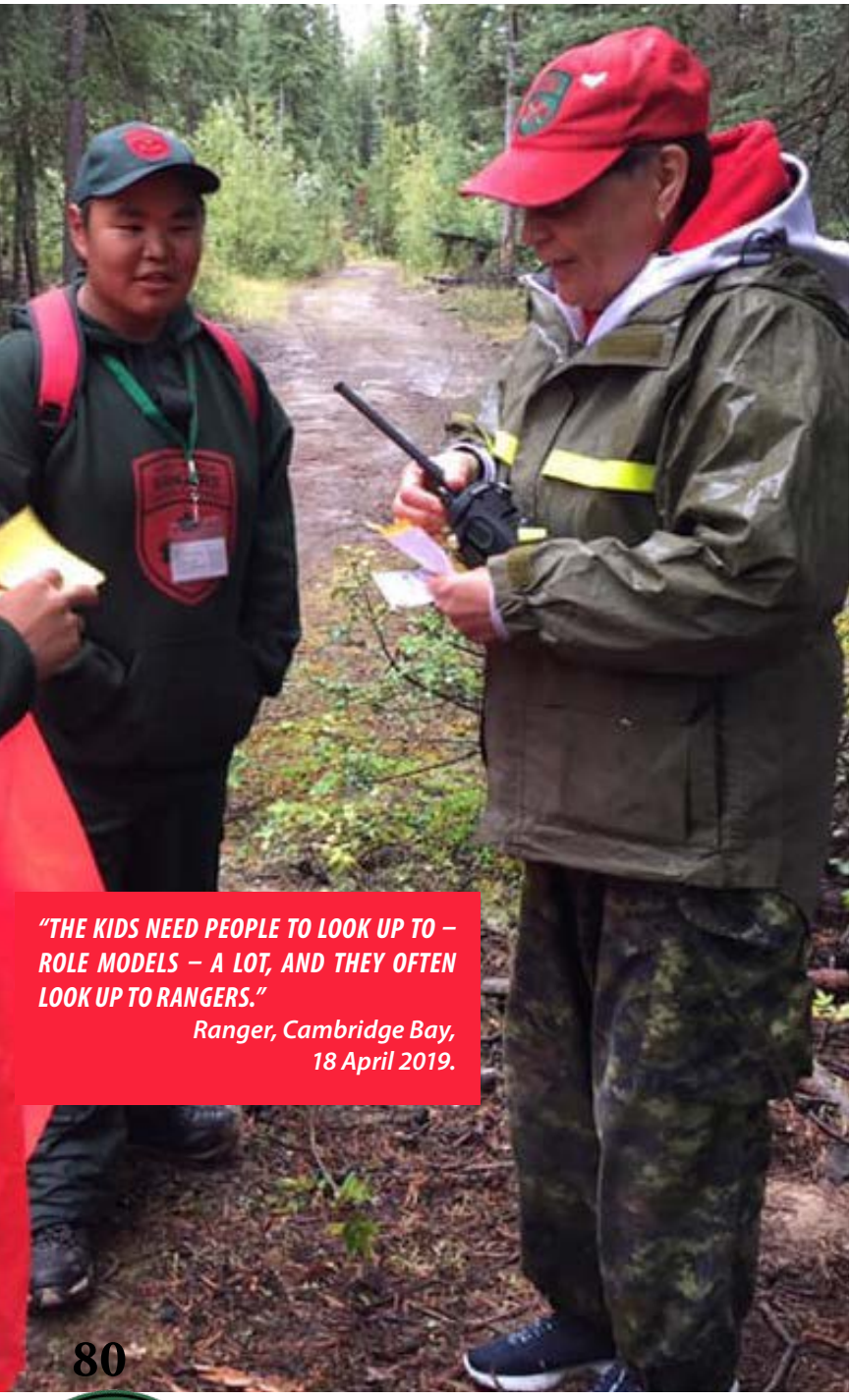
THE IMPORTANCE OF LOCAL RESILIENCE-BUILDING INITIATIVES

"How might we support and enhance community resilience in the Arctic? Resilience is best established from the bottom-up through the engagement, interaction and initiatives of individuals and organizations within communities. Locally driven resilience-building initiatives are the most effective because they tend to be culturally appropriate and address the communities' priorities. These may include initiatives from self-governance and co-management of resources to on-the-land education programs for youth and hunter support programs to provide country food for our communities. Economic vitality and stable, predictable and long-term public and private funding mechanisms are also critical elements. And partnerships are pivotal, as they will help to ensure accessible and long-term funding sources, and work to build trust across sectors. These conditions can be met by building authentic, productive, interdisciplinary, community-based relationships. These partnerships should include Inuit community voices, the public and private sector, academic and third-sector perspectives, as well as respect for established Inuit governance structures. Arctic communities need to leverage their strengths…

Linking community well-being to community resilience is an important step toward ensuring that northerners and their communities are able to address properly the various impacts of Arctic change."

- Duane Smith, Chair of the Inuvialuit Regional Corporation, "Inuit Perspective," in The Arctic in World Affairs *(2013), 238.*

- Positive early experiences, including the development at an early age of a sense of pride in culture and/or community;
- People-place connections – the connection to the land and environment can keep people in a community;
- Attachment to the community, which can be fostered through social networks, connection to the environment, lifestyle choices, opportunities, etc.;
- Self-reliance, community problem-solving capabilities, and the ability to draw upon existing resources to address issues facing a community;
- Strong and engaged community organizations;
- Infrastructure and support services – everything from health, to transportation, to social services, to recreational services, and water supply;
- Sense of purpose;
- Diverse and innovative economy.[16]



"THE KIDS NEED PEOPLE TO LOOK UP TO – ROLE MODELS – A LOT, AND THEY OFTEN LOOK UP TO RANGERS."
Ranger, Cambridge Bay, 18 April 2019.

Indigenous knowledge, culture, and skills also represent a vital characteristic of community resilience in Indigenous communities, which is covered in the following chapter.

Metric of Success: Community stakeholders recognize the Ranger patrol as a platform for listening, sharing, and identifying issues within a community; bolstering community self-reliance; and providing a space for community members to learn and apply traditional and local knowledge and skills.

5.2 THE RANGERS: COMMUNITY LEADERSHIP AND ROLE MODELS

As noted earlier in this report, one of the distinctive features of the Canadian Rangers as a community-based organization is that Rangers elect their patrol leadership (sergeant, master corporals, and corporals) from amongst the ranks of the Rangers in their community. In theory, these elections are held annually and are secret ballot. In practice, the frequency and form depend upon the patrol and the community, as well as local culture. Elections (or confirmation of existing leadership) are typically held during annual visits by Ranger Instructors (Type 1 patrol) in a community. If any patrol members have approached the Instructor and requested an election, one is held. If the patrol members indicate that they do not want an election, and no leadership positions are open, they may simply confirm the existing leadership. Usually an Instructor asks patrol members to nominate someone (or themselves) for a position, and then an election is convened by secret ballot. Although an Instructor is present, the process is community-driven and affirms how Rangers in patrol leadership positions are not only from the community but selected by community members – a form of local empowerment and patrol self-governance.

Participants in focus groups emphasized how Rangers help their community work together. "Communities need good leaders," especially a "more diverse leadership" that can bring in new ideas, skills, and leadership styles, one Ranger explained. The key to this process is "identifying strong leaders," building up their skill set, "encouraging them to take leadership roles," and actually creating the opportunities and spaces in which they can be leaders.[17] The training and activities undertaken by patrols teach Rangers how to lead and how to follow, and how to work as a group or team. In doing so, the Ranger organization produces new leaders for communities. In Kugluktuk, Sgt. Roger Hitkolok spends a lot of time teaching the younger members of his patrol to be leaders, both while on the land, during exercises, and in their interactions with the broader community. "When we do activities in the community, I teach the Rangers to be respectful," he explained. "They need to lead in community events. Be respectful always. At the Remembrance Day event, I tell them not to laugh or joke, need to be respectful."[18]

Metric of Success: The Ranger organization strengthens local leadership by identifying experienced and new leaders, and providing the time and space required for their development.

Indicator of Success: Canadian Rangers elected to leadership positions have access to DP2 Patrol Commander training or have equivalencies confirmed by the Commanding Officer.[19]

In every focus group, participants highlighted the role that Rangers play as role models in their communities and their ability to create a sense of community pride. Within their communities, Rangers are known to be self-reliant, respectful, confident, and strong, which has generated much support for and pride in the organization. In particular, participants emphasized the role the Rangers play in providing strong role models to teach youth and young adults how to behave properly and respectfully. "When I was a little kid, I remember seeing the Rangers and being proud of them," Ranger Miles Pedersen, who serves in the Kugluktuk patrol, recalls. "I remember them leaving on their patrols, seeing them in action. I've always thought they were awesome, and wanted to join as soon as I could. Now I see young kids looking to me in the same way, and it makes feel very proud. That's pretty cool."[20]

Metric of Success: Ranger training and activities allow for intergenerational skill sharing and leadership development.

This crosses gender lines. A female Ranger from Taloyoak explained that she joined the Rangers because only men were joining the patrol. She wanted to serve as a role model who would inspire other women to become Rangers – in turn, allowing them to serve as role models in the community. Given the comparatively high levels of women in the Rangers and their leadership in many patrols, Ranger service does not fit with political scientist Andrea Lane's depiction of a "pernicious masculinist remilitarization of the Canadian Armed Forces" that has "reified an existing gendered binary within Canada and the CAF" and marginalized women in service.[21] MCpl Therese "Dollie" Simon, a Ranger since November 1994 who leads the Junior Canadian Ranger (JCR) program in Fort Resolution, NWT, is a prime example. In her "day job" she is a coordinator for the Deninu K'ue First Nation Community Wellness Program, where she works with local people with addictions. "Basically, I was looking to do something different but little did I know that it was something I was missing – going out onto the land, hunting and reconnecting that way," she explained about her decision to join the Rangers. "I enjoy it and I now have lifetime friends that I have made all over the Yukon and Northwest Territories. And, we are always learning something new." She describes the Rangers as a uniformly "positive experience – a break from the busyness of the day though we do work hard. The bonus is that we get paid."[22] Given her wide range of expertise, Simon is often called upon to mentor other Rangers about Promoting Healthy and Safe Environment (PHASE) training (discussed below) and to facilitate discussions amongst Ranger leaders about sensitive community-level challenges (such as domestic violence, sexual harassment and abuse, and bullying).

Metric of Success: Both men and women in Ranger leadership positions are recognized for their contributions to community health and resilience.

Rangers and their communities take pride in the conduct of the members of a patrol, their general willingness to volunteer their time and efforts, and the various activities they conduct

"*Kitikmeot hamlet thanks 'community heroes,'" Nunatsiaq News, 28 September 2016.*

– from training military personnel from the south (which generates a great deal of pride amongst the Rangers) or leading community events.[23] Ongoing learning opportunities, knowledge sharing, and skill development bring collective benefits for communities as a whole. "We are a total part of the community and fallback when things go wrong – both for the First Nation and for the municipality," one Ranger described.

5.3 SOCIAL NETWORKS AND COMMUNITY TOGETHERNESS

Rangers often discuss community issues at monthly meetings or during more informal "check-ins." Hitkolok explained that, in Kugluktuk, "I meet with my corporals all the time, and we talk about things. I prepare them for when I am away. I meet with my MCpl every other day just to chat about things."[24] Atlin Ranger Sgt. Scott Odian explained during a focus group discussion that if the RCMP calls the Rangers, "one phone call gets the leadership moving" because there is an established chain of command in place. Because every Ranger is expected to maintain a level of readiness, reaching out to the patrol commander provides a single point of access to the whole organized group. "There is no need to explain afresh because the Rangers all know each other and know their roles," Odian explained.[25] In Fort Smith, Sgt. Brenda Johnson noted in 2015 that she led her patrol in monthly tactical exercises, equipment conditioning, and Type 2 patrol training when Ranger Instructors were not in town. "We pick spots that we're not sure about and our job is to see if we can get there to begin with and what access routes we can use different times of the year," she explained, describing her patrol to be "like a tough little family. If you enjoy the outdoors and you enjoy doing the work stuff it's not so much a job, it's more a pastime."[26]

Indicator of Success: Ranger patrols hold regular monthly meetings to ensure a continued state of readiness, conduct training, maintain established lines of communication, and perform wellness checks of their members.

Metric of Success: Members of a Ranger patrol use their links with other community groups and relationships with higher levels of government and outside organizations to positively affect the health and well-being of their community.

Membership in a patrol can create a sense of belonging, shared identity, and purpose, contribute to a positive outlook, and provide an individual with support and assistance if required, thus contributing to the social networks and community togetherness that strengthen resilience. During focus groups, Rangers reported that they often check in on one another, especially in times of hardship or personal struggle, and are willing to share and discuss their feelings and struggles. An experienced Ranger in Gjoa Haven noted that a large part of his job as sergeant was to look after the members of his patrol. "Look at a dog team. There is always one leader in the team that looks after the rest of the team. As a leader, we have to look after every member of the patrol and care for them," he explained. "In the past, being a Ranger was like being a father, looking after children."[27]

Scholars note how "families are a fundamental institution upon which more formal institutions rely, and this is especially true of militaries." In a study of Canadian military families and gender, Spanner highlights conventional forms of full-time Regular Force and Primary Reserve service that expect military spouses (usually wives) to "suspend their own careers, and relocate willingly for new postings. Thus, the civilian family becomes subservient to the soldier and the military as an institution, which itself often performs as a patriarchal family."[28] These assumptions (tied to mobility and separation) do not apply in the case of the Rangers, however, and rather than substituting for family networks and pulling people away from their home communities, Ranger service often reinforces them. Indeed, in some communities, a Ranger patrol directly builds upon family networks and offers another outlet for their collective energies. As one Ranger from Kugluktuk noted, "so many of us have fathers, grandfathers, uncles, aunts, who are also members. The Rangers is a family thing. It's working because so many family members join."[29]

FAMILY BUSINESS:

HOW ONE KUGLUKTUK CLAN HAS BEEN KEEPING WATCH OVER THE ARCTIC FOR MORE THAN 65 YEARS

By P. Whitney Lackenbauer

Originally published in *Inuktitut* magazine (Fall 2016).

When Brayden Pedersen joined Kugluktuk's Junior Canadian Rangers three years ago, he was following a proud tradition spanning generations in his family. In fact, in joining, Brayden became the first known fourth-generation member of the Ranger family in the organization's nearly 70-year history. With his younger sister Alycia following him in the footsteps of their father, grandfather, and great-grandfather, the two are helping to ensure that the eyes and ears of the Canadian Forces in the North remain steadily fixed.

Red Pederson, Brayden and Alycia's great-grandfather, moved to the Canadian Arctic from Denmark in 1953 at the age of 17. While managing Cape Dorset's Hudson's Bay Company store in 1960, Red was commissioned as a Ranger lieutenant, one of four officers on Baffin Island. With one captain senior to him in Frobisher Bay who was responsible for the entire company, Red ran the show locally around Cape Dorset. His duties included distributing Lee Enfield rifles and ammunition so that Rangers could hunt caribou and seal. His two dozen or so Rangers conducted patrols and even received a bit of demolition training from the army, a skill that provided Inuit with practical knowledge of, as he says, "how to get soapstone without breaking it."

Red, his wife Lena, and their four children moved to Kugluktuk in 1969, the last year he actively served. When the military introduced a restructured version of the Canadian Rangers in the 1970s, he was not invited to play a role. It wasn't until 1988, however, when he was serving as the speaker of the NWT Legislative Assembly, that he was officially retired and given a service medal during a ceremony in Yellowknife.

Red has always remained a strong supporter of the program and of his family's involvement in it. With two sons and three grandchildren in the Rangers, and two great-grandchildren in the Junior Rangers ("so far!"), many of his 34 remaining great-grandchildren are anxious to turn 13, the minimum age of a Junior Ranger, so that they too can continue the family tradition.

Red's son Baba joined the Rangers in 1993. "The men I looked up to at that time – my mentors – were Rangers, and I wanted to be like them and do stuff they were doing," he says. Baba went on to become the Kugluktuk patrol's Master Corporal in 1999, a position he still holds today.

Baba's son Calvin became a Junior Ranger when the program was first introduced in Kugluktuk in 1998. Naturally, he became a Ranger as soon as he turned 18. "I was right into it, so [my father and grandfather] didn't need to encourage me very much," he recalls.

When Inuit enrol in the Rangers, they are considered trained, self-sufficient members of the Canadian military because of their deep knowledge and familiarity with their homeland. "We're here, we're naturally all over on this land," Calvin explains.

That knowledge is particularly important when Rangers conduct regular security patrols of the North Warning System, a four-to-five-day round trip that covers roughly 800 kilometres. But the task is changing with each generation. "It is not safe to go out on the ocean as early as we used to, or to go out as late in spring," Baba says. "So this year we did three North Warning System patrols in the winter by snowmobile and one in summer by boat."

The Rangers also play an important role in teaching Arctic survival skills and guiding southern Canadian troops when they come to the North. "For some of them, it's their first time seeing snow and the frozen ocean," Calvin explains. "It's a complete shock for some of them."

The members of the Kugluktuk Rangers also learn from one another. "Getting to travel with all of them and learn from all of them, it's unbelievable," Calvin says. "We have 30 guys from all age groups in Kugluktuk. You couldn't ask for a better group to learn from."

Calvin has been proud to pass that knowledge to the Junior Rangers, a group that includes his son Brayden, 16, and daughter Alycia, 14. Brayden has been serving as a Junior Ranger for the past three years, while Alycia has done so for the past two. They both hope to become Rangers when they turn 18. If he has kids, Brayden says he will make sure they also become Rangers someday. As fourth-generation members of the 1st Canadian Ranger Patrol Group, he and Alycia already uphold the family tradition of service and reaffirm the deep connection between Canadian Inuit and the Rangers.

> I am proud to have so many family members in the Rangers and Junior Rangers," Baba explains. "The program teaches us valuable life skills and how to be good citizens, and it gives us a chance to be more involved in our community and our country. Being a Ranger makes me feel more Canadian.

FIGURE-5.1: "Nunavut remembers: These four men, among the first Canadian Rangers in Pond Inlet, stand together at the Baffin community's Remembrance Day ceremony ... in St. Timothy's Anglican Church. While they are not the strongest now, Sgt. Titus Allooloo told the congregation, they were chosen to serve as Canadian Rangers because of their skills as hunters and their ability to survive self-sufficiently on the land in the Arctic. During the ceremony and following church service, Gamalial Kilukishak, left, Ham Kadloo, Paniloo Sangoya, and Ludy Pudluk were seated in a place of honour at the front of the church.... About 11 other Rangers from Pond Inlet took part in the ceremony. Each Ranger placed a poppy on a wreath and saluted while facing the flags of Canada, Nunavut and the Canadian Rangers." Photo by Beth Brown. *Nunatsiaq News*, 1 November 2018.

5.4 SUPPORT TO COMMUNITY EVENTS

Rangers also facilitate community events and outreach activities, which are vital in building social networks, a sense of belonging, and shared identity (social capital) in communities. Rangers have crafted hiking, snowmobile, and dog sled trails, for their communities.[30] Rangers and JCRs in many communities have delivered hampers, food, and gift baskets to needy families at Christmas and other holidays.[31] They help out with running traditional activities, bingos, and countless local holiday games and activities.[32] In Taloyoak and Gjoa Haven, the Rangers and JCRs have raised money to purchase airfare and accommodations for community members to attend funerals in other communities. The Ranger activities strengthen the social fabric of their communities.

Other activities have regional impacts. For example, 1 CRPG has been a long and integral active partner in the success of the Yukon Quest, the annual international dog sled race introduced in chapter 3. "The Yukon Quest relies heavily on the support of the Canadian Rangers from year to year," Quest executive director Natalie Haltrich explained in 2018. "They work tirelessly on the trail in the weeks leading up to the race and report back with valuable information that we can pass along to the mushers and race personnel so they know what to expect on the trail ahead of them. Their efforts are not only important for the planning of the race, but also in helping us assess ever-changing trail conditions." LCol Luis Carvallo, the Commanding Officer of 1 CRPG, highlighted how the Rangers' ongoing contributions were consistent with the unit's "aim of deepening relationships with local communities," and how the Quest "offers a unique training opportunity for our Yukon-based Canadian Rangers."[33] This is a prime example of

how exercising Ranger skills and community support go hand in hand.

Visible Ranger involvement in national events such as Remembrance Day, National Indigenous Peoples Day, and Canada Day also promote a positive, familiar image of the Canadian Armed Forces at the local level. Ranger involvement in these ceremonies provides a focal point for appreciation of the military and first responders more generally. Thanking these groups in his 2017 Remembrance Day remarks, Inuvik mayor Jim McDonald singled out the Canadian Rangers, "who are the eyes and the ears of our military, ensuring that the true North remains strong and free."[34] Rangers also play an ambassadorial role, welcoming Canadian and foreign dignitaries with honour guards and introducing them to their communities, to their cultures, and to life on the land. In 2017, for example, Rangers provided a colour guard for Prince Charles when he visited Nunavut that summer,[35] and for Governor General Julie Payette when she opened the Inuvik-Tuktoyaktuk Highway that fall.[36] Rangers are called upon annually to provide insights into Northern life to officers on the Canadian Forces College Joint Command and Staff Program's visit to the Arctic, as well as to foreign ambassadors and Canadian foreign service officers visiting the Arctic on familiarization tours.

Metric of Success: Canadian Rangers are involved in community events and other community-building activities, and contribute to other groups and organizations in their communities (eg. outreach to schools, support to volunteer firefighters).

Metric of Success: Canadian Rangers are actively involved in supporting regional, territorial, and national events.

5.5 YOUTH

By getting people out on the land, the Rangers also strengthen the people-place connections so essential to community resilience. Not only do on-the-land activities make people more attuned to their environment and better able to navigate environmental change and risk, they create incentives for people to stay in the community (thus combating depopulation). As several participants in the JCR leadership focus groups noted, young people who do not have frequent opportunities to go out on the land and experience traditional, land-based activities often leave their community. As one Ranger suggested, "Keeping young people in the community is all about that connection to the land." Another participant summed it up as: "a strong community needs people who love their home." To paraphrase the conversation, participants explained that you do not always love the house that you are in (given the uneven state of Northern infrastructure), but you love the land around you and the people in your community.[37]

The JCR program was established in 1996 to offer Northern Canadian youth opportunities to participate in structured activities, to provide positive role models, and to combat challenges such as isolation and boredom. This military-funded program (which is free to participants) is open to youth from age 12 to 18, and is based on three circles of learning:

- Traditional Skills such as fishing, the local language, music and traditions, traditional cooking, and spiritual ceremonies
- Ranger Skills such as navigation, firearms safety, and camping, as well as the role of the Rangers within the CAF and basic drill (which the JCRs themselves enjoy and often insist upon)
- Life Skills such as good nutrition and hygiene, the importance of staying in school, drug and alcohol abuse awareness, citizenship, anti-harassment and abuse

Many Rangers highlight their work with the JCRs and other community youth as a key component of and contribution to community-building. In Kugluktuk, Sgt. Hitkolok highlighted the role of the Rangers in teaching young people new skills, such as first aid and GPS, how to live and travel on the land, and how to have a positive impact on the community. "We train people ourselves, that is important. Even the young JCRs. We make them look for things on the land, let them do things on the land themselves. We make them find things, teach them how to use maps, not to rely on GPS. We teach them safe boating."[38]

The literature on rural and remote community resilience has highlighted the importance of positive early experiences, including early education, and development at an early age of a sense of pride in culture and/or community. The JCR program strengthens these attributes of resilience, while building social networks, instilling youth with a sense of identity and purpose, and a sense of responsibility for each other and the environment. As one participant in the JCR leadership focus groups pointed out, "a strong community starts young." The JCR program teaches youth how to bounce back from mistakes, and how to respond appropriately to the challenges they might face – the basic definition of resilience. It teaches youth patience, to be respectful of each other and themselves, to ask for help, and to come together in times of distress. "A community needs kindness, needs laughter, needs friends, needs people able to open up with another and share their feelings, their struggles," one Ranger advised. The JCR program, she explained, can strengthen these attributes in a community.[39]

The JCR PHASE (formerly Preventing Harassment and Abuse through Successful Education, now rebranded as Promoting Healthy and Safe Environment) program aims to strengthen many of these attributes by addressing "issues surrounding harassment and abuse through community involvement, learning and development." Utilizing culturally-sensitive methods such as sharing circles that allow youth to share and express themselves, PHASE teaches JCRs about different forms of harassment (personal, racial, sexual, emotional), abuse (physical, sexual, neglect), substance abuse, and teenage suicide. The program aims to make JCRs feel safe and protected, while promoting "healing, justice, and restoration of healthy human relations" in their communities.[40]

It is beyond the scope of this study to conduct a detailed assessment of the JCR program and the myriad ways in which it contributes

to community resilience. Conversations around the standup of the Inuvik JCR patrol in February 2018 provide a glimpse into how communities view the program and expectations about what it contributes. Ranger MCpl Gail Raddi, who led efforts to establish that patrol, noted how it was an initiative requested by the community, the Rangers, and the youth themselves. "When you see other communities doing so much with their JCRs, it just makes everyone wish we had one," she explained. "Now that we've got it, we're so excited." She cited many activities in which JCRs partook, including "on-the-land skills, target shooting, cooking, and sewing." Warrant Officer Craig Routery, a JCR Instructor, explained that "the military doesn't actually own the program, the community owns it. When it comes to planning and organizing, the community decides what's important for their youth to know. That's the strength of this program." He explained that 1 CRPG saw its roles as providing the community with the means to put their plans into action. "We take away all the normal problems, like finances, because it is expensive to do a lot of this stuff," he said. "We take that burden off of their shoulders so they can just get out there with the kids and teach them what they need to know." This community-directed focus is integral. Raddi noted how "a lot of our youth are losing the traditional culture, so it will be good to bring a lot of the traditional skills back because they'll need them when they're older." Derrien Firth, one of the youth who signed up for the program, looked forward to opportunities to travel outside of the community to meet new people, and to learning traditional skills such as hunting and trapping in Inuvik. "It's important to learn the skills and keep them going," Firth said. "So I can teach my kids and they can teach their kids."[41]

In an article celebrating the contributions of Rangers and other community volunteers in various Nunavut communities, journalist Darrell Greer wrote in *Kivillaq News* in early 2019:

> If we want our youth getting involved with positive activities that help them mature and develop personally, foster skill development and learning, bestow upon them a sense of belonging and acceptance, lay the foundation for leadership abilities and, most importantly, provide them with a safe space where having fun and social interaction are the rules not the exceptions – then it is of paramount importance that our youth have confidence in the continuity of the programs and believe there will always be someone there to open the doors and lead the activity.[42]

Having Rangers provide reliable support to youth is one component of building community-level confidence in government-backed programs, instilling a spirit of voluntarism, and building a strong base for future community leadership.

Metric of Success: Members of a Ranger patrol embrace their support to the JCR program as a core responsibility and actively engage in JCR activities.

"Town life has made things very easy in some ways. We have furnaces, running water, indoor plumbing, grocery stores – things are so easy, that we very easily lose some of our strength." [In town, it is very easy to grow complacent and to lose some of that strength and ability that this generation's parents and grandparents had]. "Once that strength is gone it can be hard to get it back. This is why getting out on the land is so important, especially for youth." [Being out on the land] "is so different from town life. It is about survival. Nothing is easy, at least not without practice. This is a good way to help a person grow strong. They need that strength – it is what will allow them to succeed."

- Participant, JCR Leadership Focus Groups, January 2019.

Indicator of Success: Canadian Rangers maintain a viable and cooperative relationship with JCR Instructors and Adult Committees (or other local stakeholders/advisors) in support of JCR patrols.

Indicator of Success: Resources (personnel and financial) are sufficient so that the JCR program is not delivered at the expense of the Canadian Ranger organization (and vice versa).[43]

5.6 MATERIAL SUPPORTS: PAY, EQUIPMENT, AND FOOD SECURITY

The literature on community resilience emphasizes the need for diverse and innovative local economies. In this respect, the Rangers make a modest but important contribution.[44] Although southern Canadian media commentators often criticize the lack of pay, equipment, and clothing provided to Rangers compared to their Regular and Reserve Force counterparts, our conversations with Rangers from across the North suggest that these critiques are generally ill-informed or misplaced. Although Rangers are not paid for their year-round service as "eyes and ears" on the land, Rangers are paid for force generation activities such as annual training patrols, local meetings, and leadership workshops, based on a budget model of an average of twelve paid days per year per Ranger. Furthermore, Rangers are paid when they participate in force employment activities such as Operations NANOOK-NUNALIVUT, NANOOK-TATIGIIT, and NANOOK-NUNAKPUT, as well as when they provide support to southern units on Northern training exercises (NOREXs) or are officially tasked to conduct search and rescue. Although the influx of several thousand dollars into a community at the end of a Ranger patrol or military exercise might appear paltry, this Ranger pay can constitute a substantive part of an Indigenous economy that balances short-term paid labour with traditional harvesting activities, thus supporting a social economy that does not conform to Western models. The influx of cash into family economies in the form of Ranger pay and compensation for equipment usage (EUR) allows Rangers to invest in environmentally-appropriate clothing, tools, equipment, and machines that they can use in their everyday lives and subsistence activities.

Indicator of Capacity: Analysis of average pay and EUR compensation annually, by patrol and region, across 1 CRPG.

When Rangers do not own their own equipment (or it is unusable for patrols or operations at a given time), they are encouraged to rent or borrow it from family members or other community members. Individual Rangers are expected to make the necessary arrangements to secure the equipment and vehicles needed to operate safely on the land. During 1 CRPG leadership meetings, headquarters staff have explained repeatedly that it is up to individual Rangers to determine how much they will pay the lenders of equipment or vehicles and to do so out of the EUR that they are paid at the end of an activity. This reflects past situations where community members have approached Ranger Instructors or 1 CRPG headquarters staff to demand reimbursement for renting vehicles to Rangers who collected EUR but did not pay the people who loaned them vehicles as promised.

Furthermore, Rangers contribute to resilience building by facilitating harvesting activities. Many studies provide detailed analysis of chronic food insecurity in the Territorial North, the limits of existing approaches to address this issue (such as subsidies through the federal Nutrition North program), and the benefits of empowering Northern communities to feed themselves in sustainable, culturally-appropriate ways. Furthermore, studies emphasize how harvesting country food stimulates local economies and empowers communities. Accordingly, the longstanding practice of encouraging Rangers to use their service rifles and annually-issued ammunition to harvest animals for food in accordance with federal and territorial laws (which also serves as a practical way to maintain their marksmanship) makes a direct contribution to food sovereignty at household and community levels. Rangers often share the country food that they harvest while on patrols with elders and the community freezer, which makes a much-applauded contribution to the food security of their communities. Training and activities that facilitate Rangers' sharing of knowledge and build confidence in land skills also support approaches to food sovereignty that incorporate traditional and local knowledge, language, and cultural continuity.[45]

SUPPORTING HARVESTERS FEEDS NUNAVUT

NUNAVUT'S POPULATION IS GROWING

MORE FOOD IS NEEDED WHICH COSTS MORE MONEY

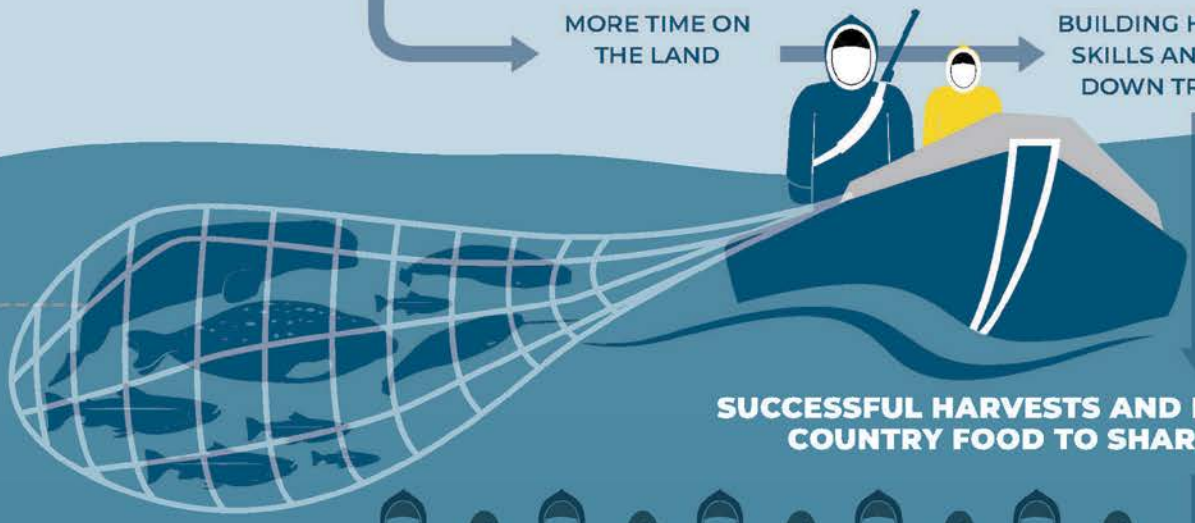
IF WE INVEST IN TRAINING AND WAGES FOR HARVESTING JOBS AND FUND HARVESTERS FOR EQUIPMENT AND SUPPLIES.

THIS MEANS

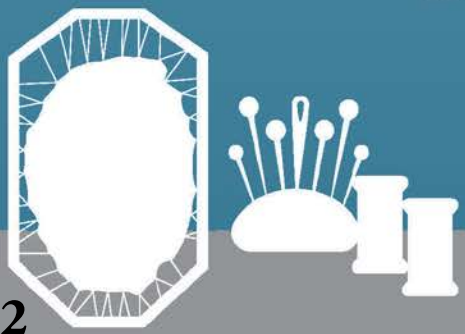
MORE TIME ON THE LAND

BUILDING HARVESTING SKILLS AND PASSING DOWN TRADITIONS

THIS MEANS

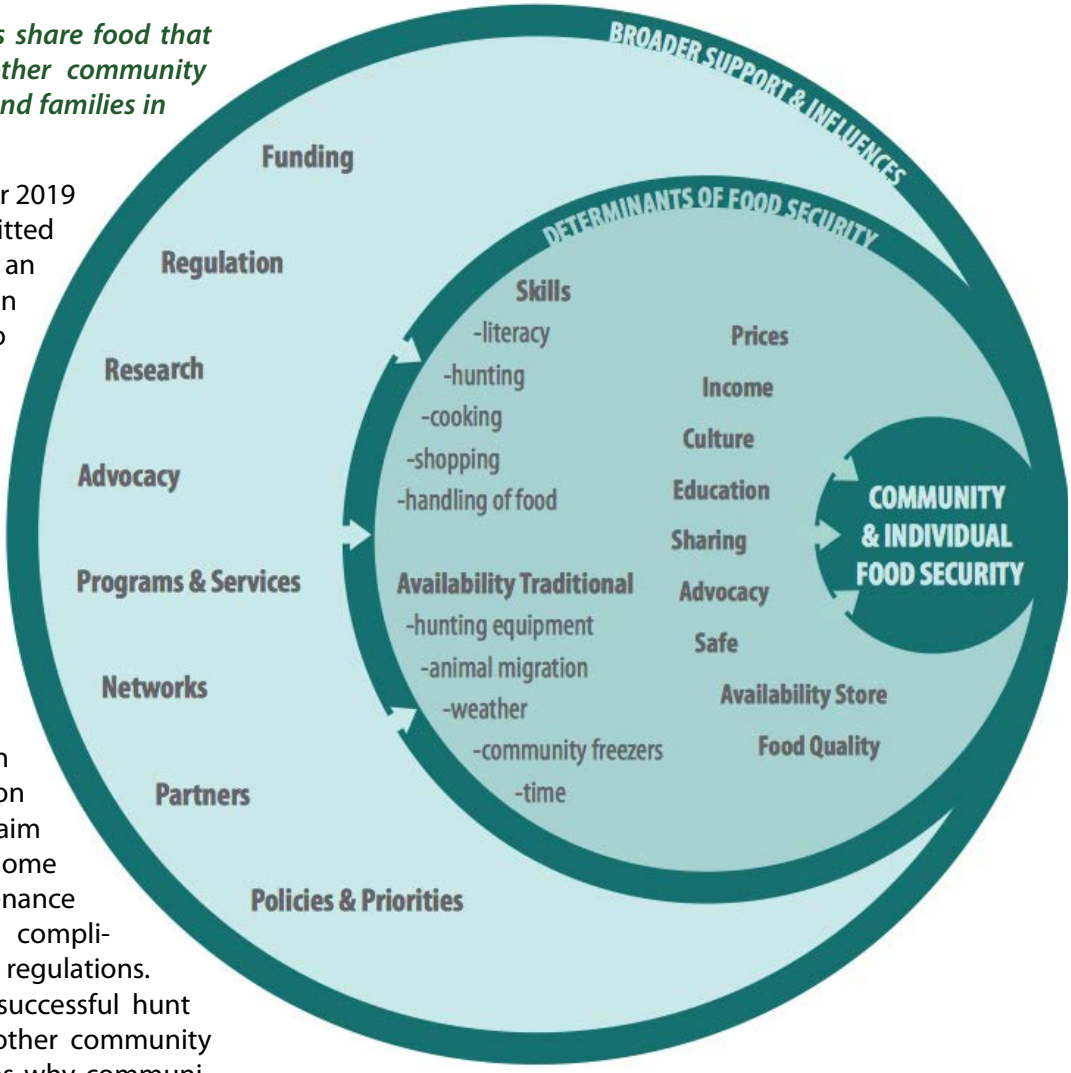


SUCCESSFUL HARVESTS AND MORE COUNTRY FOOD TO SHARE



INUIT USE EVERY PART OF HARVESTED ANIMALS. WHAT IS NOT EATEN IS USED TO MAKE CLOTHING, TOOLS, ART AND CRAFTS.

Indicator of Capacity: Rangers share food that they catch on patrol with other community members, particularly elders and families in need.



Rangers were told in late winter 2019 that they would not be permitted to hunt on Rangers exercises – an edict that likely stems from an ongoing court case related to a Ranger in Nunavut charged with illegally harvesting a caribou on Baffin Island during a Ranger exercise in 2015.[46] Rather than declaring a blanket ban on Ranger hunting during all official activities, our conversations with Rangers suggest that decision-makers may wish to distinguish between the prohibition of Ranger hunting on NOREXs or N-series ops and on Type 1-3 patrols when land claim beneficiaries operate in their home territory and provide sustenance for their communities in full compliance with applicable laws and regulations. Historically, the sharing of a successful hunt by Rangers with elders and other community members is one of the reasons why communities deeply appreciate Ranger activities on the land. To ban such practices, concurrent with the issuing of the new C-19 Ranger rifle, may send a problematic signal that things are changing and the military no longer supports the Rangers in conducting traditional harvesting in support of their families and their communities.[47]

Rangers and Ranger Instructors strongly believe that most communities see Rangers hunting while on patrol as a benefit to the community as a whole. While Rangers hunting on a paid "army exercise" might be cast in a negative light in some southern media circles where there is little understanding about the nature of Northern subsistence activities, concerns about potential media or public "backlash" must be balanced by the erosion of trust that an Army- or unit-level directive banning Rangers from hunting on a Type 1 patrol (or as small groups of Rangers more broadly) is likely to have for 1 CRPG's relationship with the Rangers themselves. It would also break from decades of common practice and bring an end to what, for many Rangers, is the most enjoyable part of a Type 1 patrol. Furthermore, patrolling as a "traditional day" during Type 1 activities allows Rangers who do not have the same experience on the land to learn from their elders and their peers. Imposing a no-hunting rule during these activities can have the unfortunate effect of exacerbating the erosion of land skills over time, with detrimental effects for Northern communities as a whole.[48]

During focus group discussions, Rangers also discussed how patrol members leverage their Ranger training – whether traditional skills passed down by patrol members or the more technical skills taught by Instructors – in other roles and occupations. Examples of formal training include basic and wilderness first aid, where certificates earned through the Rangers are recognized elsewhere. In other cases, skills

developed, refined, or affirmed through Ranger activities are quietly applied in everyday life, thus bolstering community capacity.

Despite some commentators' calls for the Rangers to take on more law enforcement and regulatory-type duties, the CAF has been clear that it has "no intention to assign any tasks to the Canadian Rangers that have a tactical military connotation or that require tactical military training, such as naval boarding."[49] Other CAF elements are better trained to perform support to law enforcement functions (where they fall within the National Defence Act), which Rangers have indicated that they did not sign up for,[50] and may be better performed by other organizations. Nevertheless, as members of their local communities, the Rangers represent an important source of shared awareness and liaison with community partners and regularly support other government agencies in responding to the broad spectrum of security and safety issues facing isolated communities.[51] The Ranger patrols in Cambridge Bay explained that they hear many stories about small ships coming through the Northwest Passage and taking things from the land, bootlegging, trading alcohol, hunting, and fishing. They expressed an interest in going out on more boat patrols to see if they can spot any of these activities and report them back to 1 CRPG. They also noted an opportunity to work more closely with the Cambridge Bay Coast Guard Auxiliary on marine search and rescue and to test a new information system showing the location of ship traffic. In conducting these activities, they emphasized their desire to fly the Ranger flag in a place that would be visible to passing ships and would highlight their presence.[52] Exploring some forms of Ranger support in the public safety realm must consider the mandates of other government departments and agencies, as well as coordination mechanisms to clarify functions that Rangers might perform, under certain scenarios, with the requisite authorities.

"IN THIS SENSE, THE METRIC OF RANGER SUCCESS IS NOT WHAT 1 CRPG CAN DO ALONE, BUT HOW RANGER CAPABILITIES FIT WITHIN, CONTRIBUTE TO, AND BOLSTER COMMUNITY-LEVEL MARITIME RESILIENCE MORE GENERALLY."

5.7 RANGERS AS PART OF A WHOLE-OF-COMMUNITY APPROACH TO BOLSTERING ARCTIC MARINE CAPABILITY

Although the Canadian Rangers are primarily a land-based organization, they have long played an active role in the maritime domain (even if this role is not specifically built into their official CAF "supporting documentation"). Rangers employ their own marine vessels for open-water patrolling during the summer and fall for which they receive cash reimbursement according to an established equipment usage rate. In employing their own watercraft, they are fulfilling their primary mandate to "provide lightly equipped, self-sufficient, mobile forces in support of the CF's sovereignty and domestic operation tasks in Canada."[53] Furthermore, by reimbursing individuals who have invested in their own, privately-owned equipment (rather than government-owned assets), this approach allows Rangers to procure and maintain appropriate vessels and vehicles to operate in their home environments while representing a material contribution to local capacity-building.

General proposals insisting on the need to expand the Ranger maritime role typically fail to recognize the Canadian Coast Guard's efforts to build up community-based Auxiliary (CCGA) units and bolster marine SAR societies in the Canadian Arctic. Currently, there are fifteen community-based CCGA units active in the North, with over 200 auxiliary members and 25 vessels, with plans to expand further.[54] Based on the understanding that communities often struggle to identify and equip a vessel suitable for SAR missions, the Oceans Protection Plan has also established a four-year Indigenous Community Boat Volunteer Pilot Program to provide vessels and equipment to Auxiliary units.[55]

The CCGA's primary role is maritime search and rescue, with the vast majority of SAR incidents in the North occurring while people are either hunting or fishing, or travelling between communities.[56] Units are also preparing to respond to growing marine activity throughout the Canadian Arctic – from pleasure craft, to fishing boats, to cruise ships.[57] On their familiarization and training patrols, some Auxiliary units also inspect the water around transiting ships to check for signs of leaks or waste, and strive to improve maritime domain awareness more generally.[58] Finally, CCGA members seek to educate their communities about safe practices and potential marine hazards in their homeland waters.[59]

Calls for an expanded Ranger maritime role also should be cognizant of efforts by Indigenous organizations to bolster local marine capabilities in the Arctic, including the Inuit Marine Monitoring Program (IMMP) and the Guardians program. Through these programs, Inuit are taking the lead on monitoring and protecting their waters, while adding additional layers of capability to respond to potential emergencies and SAR incidents.[60] In its brief to the Special Senate Committee on the Arctic in March 2019, the Inuit Circumpolar Council asserted that "Inuit are always the first to respond to an emergency, and in doing so with limited training and resources they risk their own safety and security." Accordingly, it urged the federal government "to enhance search and rescue and emergency protection infrastructure and training in Inuit communities."[61]

Rather than expanding the Rangers' maritime role, 1 CRPG may wish to encourage government officials to focus on ensuring that the myriad groups already active in the maritime domain improve their interoperability so that they can work together during emergencies. In this sense, the metric of Ranger success is not what 1 CRPG can do alone, but how Ranger capabilities fit within, contribute to, and bolster community-level maritime resilience more generally.

Indicator of Capacity: Rangers are considered for other military or civilian-offered courses that would assist with the specific performance of their duties and/or their integration with other elements of the CAF or civilian agencies.[62]

Indicator of Capacity: 1 CRPG keeps track of which Rangers are also members of other safety-related volunteer organizations at the community level, such as the Canadian Coast Guard Auxiliary, Ground Search and Rescue, Inuit Guardians, and Civil Air Search and Rescue Association (CASARA).

THE CANADIAN RANGERS AND INDIGENOUS RESILIENCE

P. WHITNEY LACKENBAUER AND PETER KIKKERT

The Canadian Rangers exemplify how a sub-component of the Reserve Force can harness the benefits of diversity, ensuring that Northerners are integrally involved in the defence team when it operates in Indigenous homelands, and developing local capabilities that both reflect and support the interests of local communities. Although Canada's defence policy lists Indigenous peoples as an "under-represented population within the Canadian Armed Forces," this does not reflect the situation in 1 CRPG. Through the Rangers, Indigenous people in Canada's Territorial North serve in the CAF at a far higher rate per capita than Canadians do on average. Rather than adopting a deficit approach, a more appropriate framework might be to analyze why the Canadian Rangers have made the CAF an "employer of choice" for Indigenous men and women living in Northern communities.

The Rangers provide an important outlet for Northern Indigenous peoples who wish to serve in the defence of their country without having to leave their communities. Ranger activities allow members of Indigenous communities to practice and share traditional skills, such as living off the land, not only with people from outside their cultures but also across generations within. These skills are central to Indigenous identities, and there is a persistent worry that these will be lost unless individuals have opportunities to exercise them and share them with younger generations. By celebrating traditional knowledge and skills, as well as encouraging and enabling community members to go out on the land and share their knowledge and expertise, the Rangers can play an important role in supporting the retention or expansion of core cultural competencies. In turn, the Ranger concept is inherently rooted in the idea that the unique knowledge of Northern Indigenous peoples can make an important contribution to effective military operations. It is this partnership, rooted in mutual learning and sharing, that has made the Rangers a long-term success on the local and national scales.

6.1 DEFINITIONS AND KEY THEMES

Scholars often incorporate concepts such as cultural resilience, traditional knowledge, and Indigenous languages into the broader construct of community resilience. Some suggest that the unique experiences and intergenerational trauma faced by Indigenous peoples require a distinct category: Indigenous resilience. Indigenous communities face vulnerabilities that are consequences of long historical processes, including colonization and assimilative, oppressive, and marginalizing government policies. Laurence Kirmayer et al. argue that "Aboriginal resilience must be considered in terms of the impact of structural violence, and interventions must take a long-term approach to rebuild, repair and revitalize community strengths and institutions."[1] As such, Indigenous peoples "have diverse notions of resilience grounded in cultural distinctive concepts of the person that connect people to community and the environment, the importance of collective history, the richness of Aboriginal languages and traditions, as well as individual and collective agency and activism."[2]

Indigenous resilience is closely aligned with the broader concept of cultural resilience, which considers "how cultural background (i.e., culture, cultural values, language, customs, norms) helps individuals and communities overcome adversity." As Caroline Clauss-Ehlers notes, "the notion of cultural resilience suggests that individuals and communities can deal with and overcome adversity not just based on individual characteristics alone, but also from the support of larger sociocultural factors."[3] Within these definitions, building Indigenous resilience involves the revitalization of language, culture, traditional ecological knowledge, oral tradition and story-telling, connection to land, healing traditions, spirituality, and ceremony.[4] In their study of Indigenous youth in five circumpolar countries, James Allen et al. concluded that "positive cultural identity appears to confer feelings of self-worth, self-efficacy, connectedness, and purpose to indigenous people."[5] The preservation of Indigenous languages, in particular, has a positive correlation with lower suicide rates and improved community health.[6]

To strengthen essential elements of Indigenous resilience, communities and scholars alike have called for education that is culturally sensitive and locally controlled. This includes going out on the land and learning from elders, particularly about how to pursue subsistence activities.[7] "In Canada, Aboriginal people clearly understand that their collective identity, health and well-being are intimately connected to their relationship to the land," Kirmayer et al. argue. "Knowing how to survive on the land and being able to maintain oneself and one's family through economic activities associated with the land provides a path to develop and maintain self-efficacy and self-esteem."[8]

Indigenous governments and scholars propose various forms of land-based activities and relationships to enhance protective factors underlying concepts of resilience in Indigenous communities.[9] "Some have direct therapeutic outcome goals such as increasing self-esteem or encouraging pro-social behaviours," Jennifer Metisse Redvers notes, while others "recognize the general importance of spending organized time out on the land for healing in response to intergenerational trauma and its related impacts." She cites a particular Yukon program that combines traditional land-based Indigenous healing practices and cultural counselling with Western therapy and addictions treatment in a remote camp-based setting. Other land-based programs in Yukon are more oriented towards skill development, "and are built on the importance of environmental education and traditional knowledge or cultural continuity, all the while recognizing the interconnectedness of environmental and human health." Accordingly, she highlights how Indigenous academics across Canada are developing "an Indigenous Land-based pedagogy which links education, environmental and cultural values, and wellbeing."[10]

As in the broader category of community resilience, scholars note that relationships, social networks, and connectedness are vital to Indigenous resilience. Much of the work on the importance of social networks has focused on the health and well-being of youth. Multiple studies have shown that Indigenous youth "tend to rely on cultural and social networks for help rather than professional resources."[11] In their study of stress and resilience amongst Inuit youth in Nunavut, Michael Krall et al. explain that Inuit view resilience as "hope or niriunniq" or as "having a

foundation on which to live." They found that "resilience described by Inuit youth was relational or ecological, centered on relationships, including talking, primarily with friends and family." The "foundation on which to live" required activities that strengthened social networks and connections in a community, that brought youth, parents, and elders together, that promoted consistent youth engagement in the community, and that encouraged people to be respectful, to share, and to care.[12]

The Conference Board of Canada's 2014 study on "Building Community Resilience in Whatì, Northwest Territories" offers an example of practical, community-level steps that can help to build Indigenous resilience in a Northern community. In response to a request from chief and council to examine new ways to enhance the well-being and capacity of their community, as well as its ability to manage emergencies and disasters, the study applied Rural Disaster Resilience Project (RDRP) assessment tools to discern how a strengths-based approach fit well in an Indigenous community context. The report revealed various strengths in the Dene community, including:

- the existence of a good emergency plan
- the closeness of the community, including diverse intra-community ties and strong family bonds
- strong traditions and preservation of the Tłı̨ cho language
- strong local leadership
- the promise and substance of the Tłı̨ cho [Land Claim and Self-Government] Agreement

Project participants also identified the local Ranger patrol as a source of community resilience, alongside traditional hunting, gathering, and country food sharing practices. "Due to their knowledge of the land, backcountry and survival skills, training in search and rescue, emergency response, and first aid, Rangers are a valuable local asset," the report observed.[13]

INDIGENOUS PEOPLES "HAVE DIVERSE NOTIONS OF RESILIENCE GROUNDED IN CULTURAL DISTINCTIVE CONCEPTS OF THE PERSON THAT CONNECT PEOPLE TO COMMUNITY AND THE ENVIRONMENT, THE IMPORTANCE OF COLLECTIVE HISTORY, THE RICHNESS OF ABORIGINAL LANGUAGES AND TRADITIONS, AS WELL AS INDIVIDUAL AND COLLECTIVE AGENCY."

Kirmayer et al., "Rethinking Resilience from Indigenous Perspectives" (2011)

DEFINITIONS OF TRADITIONAL KNOWLEDGE

"Traditional knowledge is a systematic way of thinking applied to phenomena across biological, physical, cultural and spiritual systems. It includes insights based on evidence acquired through direct and long-term experiences and extensive and multi-generational observations, lessons and skills. It has developed over millennia and is still developing in a living process, including knowledge acquired today and in the future, and it is passed on from generation to generation… Under this definition, TK goes beyond observations and ecological knowledge, offering a unique 'way of knowing' to identify and apply to research needs which will ultimately inform decision makers." -- Inuit Circumpolar Council, *Application of Traditional Knowledge in the Arctic Council* (2013)

"Traditional knowledge is a cumulative body of knowledge, know-how, practices and representations maintained and developed by peoples with extended histories of interaction with the natural environment. These sophisticated sets of understandings, interpretations and meanings are part and parcel of a cultural complex that encompasses language, naming and classification systems, resource use practices, ritual, spirituality and worldviews." -- UNESCO, *Global Change and Co-Production of Knowledge for the Circumpolar North: Establishing a New Community of Practice* (2015)

"Traditional knowledge - knowledge and values, which have been acquired through experience, observation, from the land or from spiritual teachings, and handed down from one generation to another." -- Government of the Northwest Territories, *Traditional Knowledge Policy* (2005)

The Dene people's relationship with the land has given rise to a particular kind of knowledge that has been passed on orally across the generations, evolving through time so that each new generation can draw upon hundreds of years of Dene experience. This knowledge is articulated through the rich and specialised vocabulary of the Dene language and dialects.

Knowledge that draws upon lived experience and is passed on from generation to generation has become known as "traditional knowledge." Because this knowledge is highly adaptive and continually incorporates new experiential learnings, it is perhaps misleading to use the term "traditional;" some argue that it is more appropriate to refer to "Dene knowledge." -- Sahtu Renewable Resources Board, "*Dene Knowledge*"

"Gwich'in traditional knowledge (sometimes called traditional knowledge, traditional ecological knowledge, Aboriginal traditional knowledge, or many other terms) is both a knowledge system and a body of in-depth information. It is rooted in the use of the Gwich'in lands and resources in a traditional, respectful, and ongoing way. This information is generously shared by Gwich'in harvesters and Elders and summarized in reports. The types of knowledge collected includes information about animal behaviour and biology, plants, climate, rivers and lakes, fish, habitat, complex natural systems, migration, seasonal changes, and many other topics." -- Gwich'in Tribal Council, Gwich'in Social & Cultural Institute, "*Gwich'in Traditional Knowledge*"

6.2 THE CANADIAN RANGERS AND INDIGENOUS RESILIENCE

Ranger and JCR patrols help to strengthen the social networks in a community, building the relationships and connectedness that are so vital to Indigenous resilience and health. Rangers are engaged in their communities, participate in cultural events, and provide a conduit for people to share their concerns and experiences. In predominantly Indigenous communities, Ranger activities often feature a mix of military-style training (such as in-class PowerPoint presentations, safe weapons handling demonstrations, or how to use GPS) as well as integrated practice rooted in Indigenous pedagogy and wisdom. The organization is built around a deep acknowledgment that Northern peoples are intimately interwoven and connected with their traditional homelands, and that this fundamental relationship animates their interactions with the land and with other people.[14]

Some Ranger activities provide opportunities for Indigenous peoples to converge and engage in activities that promote and celebrate their cultures. In 2016, for example, 130 Canadian Rangers from nine patrols across the southern Northwest Territories travelled by snowmobile from their home communities to Weledeh Park along the Yellowknife River, just outside of the territorial capital, as part of Exercise Dene Ranger. Cumulatively, the Ranger patrols travelled more than 1400 kilometres on their return journeys.[15] When gathered, they engaged in various skills competitions that they proposed, including a toboggan race, a log push/pull, a fish net competition, and a snowshoe race. During this exercise, a Métis Ranger from one of the patrols in the Dehcho region of the NWT, emphasized how great it was to see Rangers from the Tlicho, South Slave, and his region come together. "There is so much knowledge from elders here – thousands of years of knowledge that we are sharing with the Army," he explained. While Ranger Instructors visited their communities to conduct training, he suggested that "the real training comes on the land where we train the Sergeants [the Instructors] from down south." He asked: "So who is doing the training, really?!"[16]

Indicator of Capacity: The role of Elders is recognized and promoted within a Ranger patrol.

This Ranger also explained how training activities led by Rangers reflect long-established Indigenous approaches to teaching and learning. When Dene and Inuit elders teach, they do not tell you what to do – you are expected to watch carefully and then apply what you have seen. "There are reasons that things are done certain ways after thousands of years," one Ranger emphasized. "It has been perfected over generations." Accordingly, the best Ranger Instructors display a key trait: they are "willing to learn and adapt to the North." The authors' discussions with Ranger Instructors over the years yield a similar observation, with our previous writing emphasizing why and how successful Instructors, "willing to acclimatize and adapt to the ways and needs of diverse communities," adopt flexible, culturally-aware approaches.[17] A recent study by Magali Vullierme, involving extensive interviews with Rangers and Ranger Instructors in Nunavik (2 CRPG), draws similar conclusions about how Rangers tend to "assimilate" their Instructors into Indigenous ways of knowing and interacting with the land, rather than Instructors trying to recast Rangers into a conventional military mold. Accordingly, she concludes that the Ranger organization makes a positive contribution to Indigenous agency.[18]

Indicator of Capacity: Ranger Instructors respect the traditional knowledge of Rangers and training activities reflect culturally-appropriate modes of teaching, including sufficient time to translate instructions into Indigenous languages.

Understanding and respecting Indigenous peoples' interwovenness with the land is pivotal to gauging how well the Rangers support Indigenous resilience. Northern harvesters and scientists have documented extensively how climate and environmental change are affecting the abundance or condition of subsistence resources, as well as hunters and gatherers' ability to access those resources safely. Studies also emphasize the critical importance of food security and food sovereignty, harvesting practices that animate a sense of identity, and how long-established codes of sharing and reciprocity sustain socio-cultural relations.[19] The

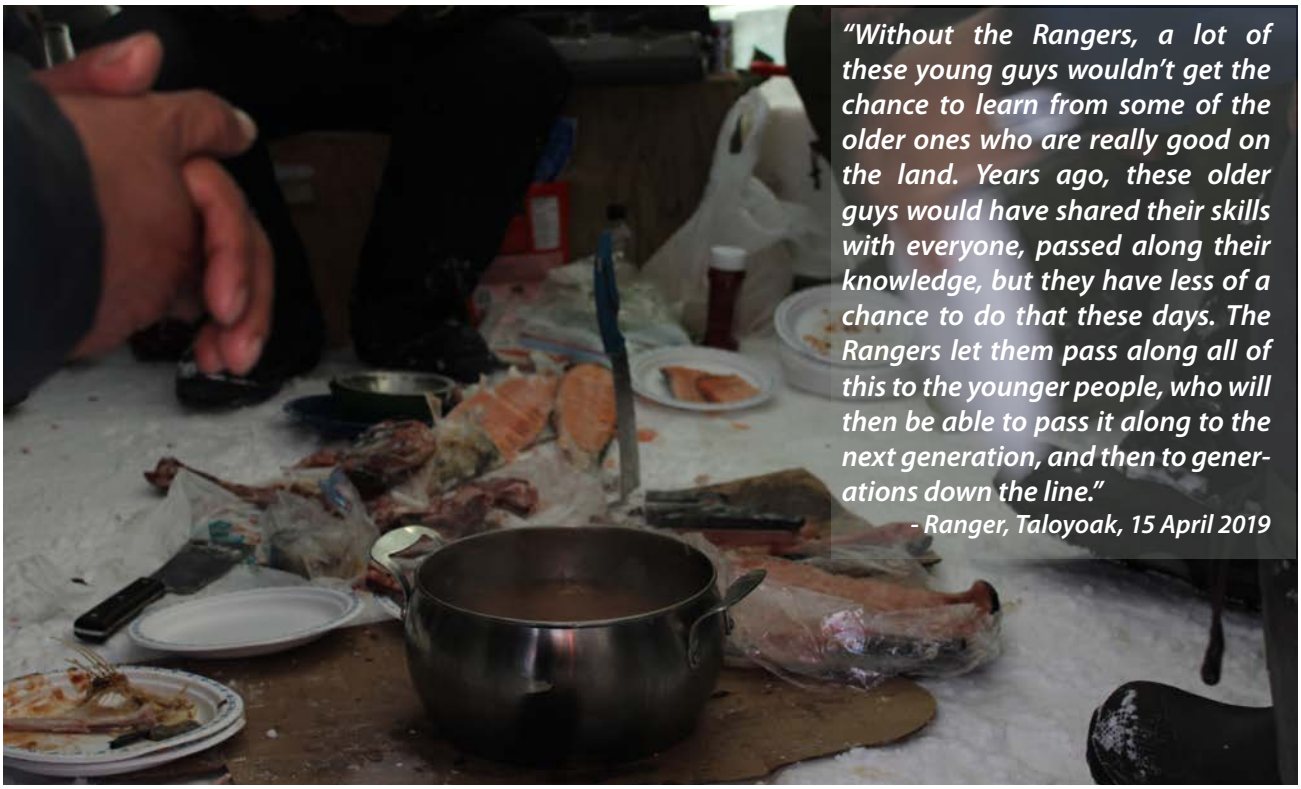
Cambridge Bay patrol explained how Ranger activities allow and encourage them to learn and practice traditional land skills, which in turn allows them to use them when the army comes up to the community or when they assist in SAR. Furthermore, Rangers in the Kitikmeot emphasized the importance of hunting and fishing while on patrol – as a way to practice and strengthen traditional skills, and because they always share much of this food with the community, especially with elders who can no longer go out on the land. The Rangers like doing this, but it also makes community members appreciate and support the patrol even more, which makes the Rangers happy and can help to attract new members.

The transmission of traditional knowledge and skills is at the heart of the Canadian Rangers. Patrols facilitate this process by bringing different generations together to learn from one another and provide opportunities to go out on the land and engage in travel and subsistence practices as a group. Through their participation in the Rangers, people have been taught how to travel safely, to read the weather and ice, to set up camp, to build komatiks/ qamutiik/ sleds, and to hunt and fish – along with a host of other skills and knowledge that allow them to survive and thrive on the land. "They must be given knowledge of the land," one Ranger explained, "because a GPS can run out of batteries, but knowledge doesn't run out of batteries."[20]

Several Rangers in our focus groups emphasized the pride that learning traditional skills and knowledge can generate – particularly when they were able to share their abilities with new patrol members and CAF personnel visiting from the south. Ranger Sgt. Roger Hitkolok of Kugluktuk tells a story of one young Ranger who he taught to navigate and lead the patrol through a winter storm. After leading the patrol through a storm, the Ranger told Hitkolok, "I feel so good" – a simple statement that captures the pride and sense of well-being generated when someone acquires traditional knowledge and skills.[21] In other cases, hunters who have survived harrowing ordeals while lost on the land lauded land skills that they had honed as Canadian Rangers as key to their survival.[22]

Focus group participants explained that, in order to transmit traditional skills and knowledge effectively, it is necessary to spend a lot of time on the land, to travel considerable distances, to practice skills continuously, and to start all of these things at a young age. Many participants emphasized the need to practice skills consistently as they can be lost easily, highlighting the importance of consistency and experiential learning opportunities. "In my culture, you don't just teach people, you watch and learn," a Ranger from Taloyoak explained. "You watch a camp being set up and then you set it up. You watch a kamotik being built and then you build one. You need to learn through action. The Ranger patrol gives us the chance to do this."[23]

When discussing the transmission of traditional skills and knowledge, Hitkolok highlights his efforts to teach younger Rangers how to respond effectively to changing environmental conditions – and emphasizes just how much is involved in this process. People with experience on the land are attuned to changing conditions and can adapt. Within Inuit culture, people who maintain their equanimity in the face of difficulty and changing environmental conditions have *ihuma* (adultness, reason).[24] On the land, a hunter who uses their mind will be careful to look at each new situation that she encounters in its totality, figuring out its implications and requirements. When faced with unexpected events the hunter responds with calmness and patience. They do not sulk, scold, get annoyed or angry. Instead, they adapt. When new conditions make it imperative, the hunter will be able to adjust their conceptions and respond. This calm and functional perception of the environment



"Without the Rangers, a lot of these young guys wouldn't get the chance to learn from some of the older ones who are really good on the land. Years ago, these older guys would have shared their skills with everyone, passed along their knowledge, but they have less of a chance to do that these days. The Rangers let them pass along all of this to the younger people, who will then be able to pass it along to the next generation, and then to generations down the line."

- Ranger, Taloyoak, 15 April 2019

allows many Inuit to view almost any object as adaptable to diverse uses, which explains the mechanical skills for which they have become so famous. In sharp contrast, someone who does not have *ihuma* will have a skewed perception of the environment and their judgments for the future will be confused and unrealistic. When faced with the dangers and rapid changes that anyone out on the land will experience at some point, these individuals crumble. People with *ihuma* will not make ill-considered or hurried responses to any situation. They contemplate various options, collect information, and weigh opinions before making a decision. Traditionally, Inuit decision-making often involved lengthy discussions that examined issues from multiple perspectives, with few people offering any clear-cut solutions. Eventually some kind of consensus-based conclusion would emerge. It is this type of contingency-based planning that makes Inuit so effective when out on the land.[25]

These examples highlight the extensive skill set and in-depth knowledge required to operate effectively in the Arctic environment, which can only be acquired through time, practice, and the guidance of more experienced people. According to Hitkolok, a Ranger patrol and, more importantly, the intergenerational connections that it fosters, can facilitate this complex process.[26]

Many of the Rangers with whom we spoke stressed the role that traditional skill building and knowledge transmission play in a group's ability to be spontaneous and flexible. As one Ranger put it, people need to be able to "react to the land" immediately and effectively. For instance, if caribou or other game are spotted, people need to be able to go to them at a moment's notice. This ability requires experience, skill, and a level of comfort that only comes from time spent on the land practicing essential skills. It also requires equipment that is ready to go at a moment's notice.[27]

THE PRESERVATION, REVITALIZATION, AND STRENGTHENING OF ABORIGINAL LANGUAGES AND CULTURES ARE BEST MANAGED BY ABORIGINAL PEOPLE AND COMMUNITIES.

Truth and Reconciliation Commission (TRC) Calls to Action 14.iv

Each community-based Ranger patrol also represents a natural platform for the sharing of stories and the use of Indigenous languages – and in so doing contributes to the cultural pride and identity of its members.[28] In Kugluktuk, several young Rangers highlighted how their participation in the patrol has improved their Inuinnaqtun, especially when they are out on the land together as a group where they learn traditional place names.[29] Lackenbauer has witnessed many examples of senior Rangers encouraging younger Rangers in leadership roles to pass along messages or orders in

"We have people in the patrol who are very good, and some who need more experience. Some have forgotten how to build an iglu or that you can survive off caribou skin if you have to. You need to give the Rangers a hard time sometimes, make them practice in weather or land they aren't used to, make them lead the patrol in bad weather. The people with a lot of time on the land train those who don't have as much. Our young fellas know how to travel on the land, but sometimes they don't know how to do it over long distances, and they lose their minds a little. I train them to listen to me and I put them through hard times. In a blizzard, I have told a Ranger he had to lead now, it's up to him. This teaches them how to travel safely. When the Ranger did this in the blizzard, he came back and told me, 'I feel so good.' Only way for them to learn, is to make them lead. It can't be the same people all the time, everyone, men and ladies, have to lead. We use our GPS all the time, and it helps, but we have to rely on our traditional knowledge – it is what lets us travel safely. Snow drifts don't lie – and so this is why I teach the Rangers the traditional ways. I teach my Rangers to constantly be on the watch, it is the only way to be safe here. So I give them a hard time a little bit, because sometimes it is hard up here."

- Ranger Sergeant Roger Hitkolok, Kugluktuk, 22 April 2019.

Indigenous languages, with the clear intent of building their confidence. Various Rangers emphasized that healthy communities are reflected in patrols that function in Indigenous languages. "We are the eyes, ears, and voice," one Inuk emphasized. It is important "that unilingual Indigenous language speakers are heard through the Rangers."[30]

Furthermore, Rangers often share the food they collect with other community members (particularly Elders) and through the community freezer. As one Ranger involved in JCR leadership explained, "You can see the pride from people as they come back from the land; see the pride if they have meat to give to elders and other community members."[31] Fate control, opportunities to connect with the land, and a strong sense of cultural integrity often go hand-in-hand and bridge individual and collective resilience (as discussed in the next chapter).

Indicator of Capacity: Rangers fluent in Indigenous languages use these during patrol activities and encourage younger members of the patrol to do so.

Metric of Success: Where applicable, a Ranger patrol serves as a platform for the intergenerational exchange of Indigenous knowledge and skills.

The transmission of traditional skills and knowledge takes time and effort, and many young people no longer have access to regular opportunities to learn from older community members with extensive land-based experience. Many of the Rangers highlighted this gap and the importance of the organization in helping to address it. While some Northern youth could rely on family members to take them on the land, Rangers noted that traditional land-based ways of sharing knowledge and skills are disappearing in some communities. One Ranger noted that youth might have the chance to go to a day camp or even a week-long camp once a year through school, but that this simply was not enough time. In contrast, participation in an active Ranger or JCR patrol can give young people the guidance and time on the land they require to begin to develop a sense of their relationship with the land and how their cultures are animated by it. As one JCR instructor explained (with support from the Rangers in the discussion), "community programs like the JCRs are becoming one of the main sources of tradition, culture and knowledge" in some Northern communities.[32]

Ranger patrols also provide support to other Indigenous on-the-land activities in and around their communities. During the summer of 2018, for example, Rangers led a group of Junior Canadian Rangers from Whatì, Behchokò, Fort Providence, and Łutsel K'e to participate in a community event on Mission Island camp constructed by the Deninu Ku'e First Nation near Fort Providence.[33] In the case of the Dawson Ranger patrol, the Tr'ondëk Hwëch'in First Nation invites Rangers to serve as hunting, guiding, and survival instructors for youth, including transporting 1500 people to the Moosehide gathering near the community.[34] Sgt. Hitkolok recalled one expedition when he guided Junior Rangers west of Kugluktuk. "When we were there a big herd came through, of caribou," he recounted. "It was the middle of the night. We watched these caribou until we went to sleep. They were right outside the tent. There were so many. The young Junior Rangers were so excited about that."[35]

Metric of Success: Experienced members of a patrol teach traditional skills and knowledge to newer members and/or the Junior Canadian Rangers, local cadet corps, or school children.

The opening of the Inuvik JCR patrol in February 2018 provides insight into how regional Indigenous leaders see the program as a whole. In her address to the new JCRs, Gwich'in Tribal Council Grand Chief Bobbie Jo Greenland-Morgan emphasized how the program is a good way for youth to learn life skills and Ranger skills, and how it is a positive way for the CAF and Indigenous people to share knowledge. "It's also helping to strengthen traditional and cultural skills. In this wonderful country of Canada that we live in, as Indigenous people, we have always had something to offer," she said. "In this program, I think the Indigenous people of the North are also helping armed forces learn about the survival skills and what it takes to live up here in the North. It's a give and take." Inuvialuit Regional Corporation (IRC) chair Duane Smith also addressed the new JCRs at the ceremony, emphasizing that his governance organization is very supportive of the JCR program and what it offers to youth in Inuvialuit communities.[36]

Many Rangers embrace their role in transmitting traditional knowledge, culture, and skills – especially in relation to the JCRs in their communities. During our focus groups with JCR leadership, participants underlined just how important this process was to the health of their communities. One participant noted how the JCR program helps youth to "walk in both worlds, to walk in western boots and traditional moccasins." Children have to learn traditional skills and culture, she explained, because this will make them stronger, more adaptable, and better able to deal with all of the changes and pressures in their communities. A strong "cultural identity will allow them to navigate both worlds," giving them the strength to take on new jobs and responsibilities.[37] Through the JCR program, youth are offered culturally-appropriate and locally-controlled education, which often focuses on traditional and cultural elements – a key component of Indigenous resilience.

Metric of Success: The Ranger patrol supports the design of culturally-appropriate curriculum and activities for the JCR program.

Ranger roles and training also intersect with Indigenous peoples watching over and caring for their homelands. Recent scholarship highlights how Indigenous peoples are actively developing Community-Based Monitoring (CBM) programs to protect their waters and lands. While CBM tends to focus on Indigenous peoples' roles as "knowledge holders," scholars also frame "CBM as

THE LAWS OF THE DENE, WHICH HAVE BEEN PASSED DOWN TO US BY OUR ELDERS, TEACH US HOW TO RESPECT THE LAND, OURSELVES, AND EACH OTHER. THEY TEACH US HOW TO LIVE IN BALANCE AND GOOD HEALTH, AND HOW TO PROTECT OURSELVES AND OUR CHILDREN. WE MUST CONTINUE TO LIVE BY THESE LAWS AND PASS THEM ON TO OUR CHILDREN.

Dehcho First Nations,
Dene Principles & Values.

a strategy for the assertion of Indigenous sovereignty and jurisdiction … both a method for generating data useful for decision-making and an expression of governance itself, rooted in understandings of stewardship, kinship and responsibility."[38] While most provision of Ranger service agreements with scientists to date (described in chapter 3) are with federal government and university partners, as Indigenous governments assume more leadership roles in CBM programs they may wish to access and leverage Ranger expertise. This may bring new opportunities to network Ranger capacity between Indigenous governments and DND, with JTFN and 1 CRPG serving as bridging organizations with regional governments/corporations. This would resonate with Indigenous organizations' emphasis on "self-determination in research" and "meaningful partnerships" that yield findings that are "efficacious, impactful, and meaningful" to Northerners.[39] These partnerships can also help DND/CAF to align its policies and practices with Indigenous environmental governance strategies and to contribute to Indigenous observation networks, thus better informing both internal and external decision-making processes.

Indicator of Success: The Ranger organization facilitates community access to other government and non-government partners and provides a foundation for member contributions to Community-Based Monitoring (CBM) programs.

6.3 RECONCILIATION

During Exercise Dene Ranger in February 2016, an Indigenous member of the Fort Simpson patrol emphasized the "bad history between the Canadian government and the First Nations." He quickly followed this statement with: "The Ranger program [*sic*] stands alone as the most successful thing that it has ever done with First Nations."[40]

Prime Minister Trudeau's 2019 mandate letter to Minister Sajjan reiterates that "there remains no more important relationship to me and to Canada than the one with Indigenous Peoples." It highlights progress on supporting self-determination, improving service delivery, and advancing reconciliation, and he directs Sajjan and every other Cabinet minister "to determine what they can do in their specific portfolio to accelerate and build on the progress we have made with First Nations, Inuit and Métis Peoples."

We consider the Rangers and the JCR program as excellent examples of how the Government of Canada can balance nation-to-nation/Inuit-Crown approaches, which support self-determination and responsiveness to local needs, with the efficiency and capacity associated with economies of scale and direct support from the federal government.[41] Furthermore, by explicitly and substantively valuing Indigenous

cultures, while simultaneously mainstreaming Indigenous realities and cultures into the Canadian Armed Forces, the Canadian Rangers are a strong case study in how the federal government and Indigenous people have developed practical ways of working together in the spirit of trust and respect.[42] "Because Ranger activities allow Northerners to exercise jurisdiction and control, they demonstrate that traditional Indigenous activities continue unbroken to the present and are supported by Ottawa," Lackenbauer has suggested. "This is a key pillar of Canada's sovereignty position. Their very presence is an affirmation of Canadian sovereignty."[43]

Based on our conversations with Rangers over the past two years, we see an opportunity for DND/CAF to more deliberately weave the Ranger and JCR stories into its own internal reconciliation narratives and into the broader federal "whole of government" narrative as well. It is critical to involve Indigenous members of the Rangers in developing and communicating this narrative to internal and external audiences directly (either in-person, via videos, or through direct quotes) rather than having their ideas paraphrased by others. Based on our focus group discussions, themes might include first-hand perspectives on how Ranger service empowers Indigenous members, how this service embraces and supports Indigenous cultural traditions and values, and how Ranger activities facilitate and promote the transmission of Indigenous knowledge/Inuit Qaujimajatuqangit, skills, and languages. Furthermore, DND should consider how it could involve Rangers more directly in developing a reconciliation strategy for the department (particularly given the large proportion that they make of the CAF Reserves and of Indigenous participation in the CAF more broadly) and in determining how to measure progress on reconciliation in a meaningful way.[44]

Metric of Success: The Canadian Rangers and Junior Canadian Ranger program are promoted as examples or expressions of reconciliation with Indigenous peoples based on recognition of rights, respect, co-operation, and partnership.

The Rangers' role in reconciliation also plays out at the local level. In recent years, 1 CRPG has also taken deliberate steps to engage First Nations that have typically been under-represented in existing Ranger patrols. For example, six residents of the Hay River Dene Reserve were sworn in as the first members of a newly-formed K'atlodeeche First Nation (KFN) section of the Hay River Canadian Ranger Patrol in August 2018. They joined two KFN members who were already Rangers in the patrol. "What we're trying to do is we're trying to work collaboratively with Hay River in many different areas and our goal is to build that relationship with them," KFN

"WE CALL UPON THE FEDERAL GOVERNMENT TO ESTABLISH MULTIYEAR FUNDING FOR COMMUNITY-BASED YOUTH ORGANIZATIONS TO DELIVER PROGRAMS ON RECONCILIATION, AND ESTABLISH A NATIONAL NETWORK TO SHARE INFORMATION AND BEST PRACTICES."
Truth and Reconciliation Commission of Canada (TRC) Calls to Action (2015), 66.

band manager Catherine Heron noted. The new section was set up under a formal letter of agreement between KFN and the CAF, which stipulated that any on-the-land activities that the Ranger patrol planned within KFN traditional territory must involve advance consultation with the First Nation. Chief Roy Fabian stated at the swearing-in ceremony that the agreement is in keeping with the spirit and intent of Treaty 8, wherein KFN agreed to share the land with Canada but retained its own level of jurisdiction over its traditional territory. It also brings mutual benefits, enabling the Hay River patrol to have great access to its area of operations, as well as assuring the KFN that it has a voice in activities happening on its traditional territory. Heron explained that she applied to be a Ranger to serve as a role model: "Just to be more of a supportive person as a band manager for the people in the community."[45]

While this agreement between 1 CRPG and a First Nation is unique, it exemplifies ongoing efforts to ensure that the Ranger organization is representative and inclusive of the tremendous Indigenous diversity across the Canadian North. The reallocation of sections within existing patrols to stand up detachments in Teslin, Wrigley, Norman Wells, and Colville Lake in 2017-18, and the stand up of a new patrol in Dettah in 2019, are cases in point.

Metric of Success: The membership of a Ranger patrol is reflective of local Indigenous voices.

6.4 DEVELOPING CULTURALLY-SPECIFIC METRICS OF INDIGENOUS RESILIENCE

Readers will also note that we have offered fewer "metrics of success" in this chapter than we have in others. This is done out of respect for the diversity of Northern Indigenous peoples and their right to co-develop or self-determine metrics that apply to them. Furthermore, while there are common values shared by Indigenous peoples across the Canadian North, we recognize the need for distinctions-based approaches that accommodate differences in rights and interests between modern treaty holders, self-governing nations, and other First Nations, Inuit, and Métis groups. Accordingly, we recommend that 1 CRPG work to identify specific Indigenous resilience metrics in direct consultation with Inuit, First Nations, and Métis members of the Canadian Rangers on a community, regional, and Indigenous nation/people basis.

Janet Tamalik McGrath devised a Qaggiq model (named after a large snowhouse) for Inuit knowledge renewal that focuses on the interconnections between *Inuusiqattiarniq* ("the Individual"), *Inuuqatigiingniq* ("the collective"), and *Niqiqainnarniq* ("always having meat" or "livelihood"). Based upon conversations with Inuit elder Aupilaarjuk, it also adapts an Indigenous peoplehood matrix comprised of language (*Uqausiq*), living histories (*Unipkaat*), land (*Nuna*), and culture (*Iliqqusiq*) to reflect Inuit philosophy.[46] As Rebecca Mearns frames in her synthesis of this model:

> Aupilaarjuk's triad demonstrates that in order for there to be a strong collective, or community, there is a need for healthy individuals that are contributing to the collective. There is also the need for a source of livelihood…. When Inuit lived

on the land solely in a subsistence economy this source of livelihood would have come from the land and the animals. Today, living in a mixed economy, the sources of livelihood can come from different sources including wages; however, it comes back to being able to sustain the individual and the collective.[47]

Metrics of success must accommodate the strands in this web of relationships. A Dene member of the Rangers who runs a muskrat camp for youth explained that, "over the years, the kids become better at doing all the tasks involved. I measure success when I see youths teaching the less experienced kids and even other adults." Another Ranger observed how passing along traditional skills often involves teaching kids how to hunt and fish, and how to prepare traditional food. "It is very easy to measure their success," she noted – "eventually, are they able to go out on their own and do it on their own."[48] In the North, collective and individual resilience are inextricably intertwined. As the Dehcho First Nations' statement on Dene Principles & Values explains, "individual rights and freedoms are respected and encouraged within the larger, more important context of a collective identity and collective responsibilities for the survival and well-being of the entire group."[49]

INUIT SOCIETAL VALUES AND INUIT QAUJIMAJATUQANGIT (IQ) PRINCIPLES

(a) ***Inuuqatigiitsiarniq*** (respecting others, relationships and caring for people);

(b) ***Tunnganarniq*** (fostering good spirit by being open, welcoming and inclusive);

(c) ***Pijitsirniq*** (serving and providing for family or community, or both);

(d) ***Aajiiqatigiinniq*** (decision making through discussion and consensus);

(e) ***Pilimmaksarniq or Pijariuqsarniq*** (development of skills through practice, effort and action);

(f) ***Piliriqatigiinniq or Ikajuqtigiinniq*** (working together for a common cause);

(g) ***Qanuqtuurniq*** (being innovative and resourceful); and

(h) ***Avatittinnik Kamatsiarniq*** (respect and care for the land, animals and the environment).

Source: Government of Nunavut, Incorporating Inuit Societal Values (2013).

DENE VALUES

Dene values are an important part of our daily lives, the values are taught from the history and continue on through the best generations.

Sharing:

The Dene shared in the use of the land and the resources of the land. In particular food. The work of maintaining the camp was shared, as was the responsibility for caring for children, and protecting the safety and health of the family.

Respect:

One showed respect for oneself and for others, for leaders and elders and those with special skills, and for the land and all living things.

Caring:

Caring was shown for all members of the extended family. The widows, orphans, and elders unable to provide for them- selves were cared for by their community. Concern was shown for the safety and protection of oneself and others in the home.

Equality:

Equality among all people, and the equality of humans and all other living creatures were recognized.

Self-Respect and Pride:

Everyone, as equals, had reason to respect themselves and take pride in doing well, whatever it was their particular responsibility to do. There was pride in being self-reliant, in being someone who could contribute something to the family and community.

Source: Dehcho First Nations, Dene Principles & Values.

THE CANADIAN RANGERS AND INDIVIDUAL RESILIENCE

P. WHITNEY LACKENBAUER AND PETER KIKKERT

> People are at the core of everything the Canadian Armed Forces does to deliver on its mandate. As we look to the future, we will also refocus our efforts on ensuring the entire Defence team has the care, services and support it requires. Doing so will be central to attracting and retaining the people we need to keep Canada strong, secure, and engaged in the world. Investing in our people is the single most important commitment we can make.
>
> *Strong, Secure, Engaged* (2017)

"When framing her 2017 report on Arctic leadership models, Mary Simon highlighted that the Canadian North continues "to exhibit among the worst national social indicators for basic wellness" and that, despite "all the hard-earned tools of empowerment, … many individuals and families do not feel empowered and healthy." Many statistics bear out her observation about unacceptably poor living standards. For example:

- 50% of Inuit households do not have acceptable housing, and the incidence of core housing need in the NWT is the second highest in Canada (with almost one in five households reporting the need for adequate, accessible and affordable housing).
- There is almost a 10% gap between NWT residents and other Canadians about their perceived health and mental health, with Indigenous populations reporting significantly poorer health and mental health
- In 2019, Nunavut had the highest unemployment rate in Canada (13.4%) (while Yukon had the lowest at 3.6%)
- There are high rates of alcoholism, sexual and physical abuse including domestic violence, criminal incarceration, and suicide
- In 2016, the tuberculosis rate amongst Inuit was over 290x higher than the Canadian-born non-Indigenous population

As the Conference Board of Canada observed in a 2017 study on "How

AS ARCTIC GROUPS ADAPT, THEY HAVE INDICATED THAT THE VIABILITY OF THEIR COMMUNITIES RELIES ON, OR AT LEAST IS MUCH ENHANCED BY, HAVING CONTROL OVER THEIR OWN FATE, SUSTAINING CONTACT WITH NATURE, AND RETAINING THEIR CULTURAL IDENTITY.

Young and Einarsson in
Arctic Human Development Report
(2004):240

Canada Performs," the territories generally fall behind the Canadian average on measures of equity (e.g. poverty, income distribution, gender and racial wage gaps) and social cohesion (e.g. unemployment rate, homicides, suicides).

HUMAN DEVELOPMENT IS EXTRAORDINARILY COMPLEX. TO DOCUMENT ALL ITS FACETS WOULD BE IMPOSSIBLY COMPLICATED, TIME-CONSUMING, AND COSTLY. EVEN A SINGLE DOMAIN (OR CATEGORY FOR THE CONSTRUCTION OF INDICATORS), SUCH AS EDUCATION OR HEALTH, HAS COUNTLESS ASPECTS THAT COULD BE MEASURED. A PRAGMATIC APPROACH IS TO CHOOSE A SMALL, REPRESENTATIVE SET OF INDICATORS FOR KEY DOMAINS, TO TRACK OVER TIME AND ACROSS SPACE. SUCH INDICATORS CONDENSE REAL-LIFE COMPLEXITY INTO A MANAGEABLE AMOUNT OF MEANINGFUL INFORMATION. THEY ARE PROXY MEASURES, USED TO INFER THE CONDITION AND, OVER TIME, THE TRENDS IN A SYSTEM.

Larsen et al.,
Arctic Social Indicators Report
(2010), 23

Perhaps counter-intuitively, the Arctic Social Indicators (ASI) project completed under the auspices of the Arctic Council discovered that, despite the relatively low score on measures such as the United Nations Human Development Index (UNHDI), many individuals in the Circumpolar North exhibit a strong sense of well-being.[1] The Arctic Human Development Report (AHDR) highlights "dimensions of human well-being that are not prominent in mainstream discussions of this topic," and it emphasizes the need to develop a system for tracking trends in human development in the Arctic over time using a set of clear indicators.[2] Alongside well-established UNHDI measures related to material well-being, health, and education, the report identified three additional domains: fate control, cultural well-being and vitality, and contact with nature. These six domains were further articulated in the ASI report published in 2010, which sought to facilitate an analytical approach "that is broad and inclusive while remaining manageable."[3]

Accordingly, we adopt and apply the ASI framework to the Canadian Rangers in 1 CRPG as a means of analyzing individual resilience, with well-being indicators grouped into six broad domains:

- Material well-being
- Health
- Education
- Cultural well-being and cultural vitality
- Fate control
- Contact with nature

Our analysis reinforces that these domains are neither mutually exclusive (there is extensive overlap) nor exhaustive in capturing the many forms of individual resilience articulated by the Rangers. Nevertheless, the ASI framework strikes an appropriate balance "between the analytic attractions of relying on a single indicator and the temptation to introduce a large number of indicators in the interests of developing a more accurate picture of complex and multi-dimensional phenomena."[4] In this chapter, we base most of our analysis on discussions with Canadian Rangers through focus group discussions at the 1 CRPG Ranger leadership meeting in Yellowknife on 14 October 2018 and Junior Canadian Ranger leadership meeting on 18 January 2019 (see appendices A and B); and visits to Ranger patrols in the Kitikmeot region of Nunavut by Kikkert and/or Lackenbauer in April 2019, October 2019, and January 2020.

7.1 DEFINITIONS AND KEY THEMES

Individual resilience, sometimes known as psychological resilience, is a contested term with different definitions, no clear consensus on measurement, and questions about its conceptual usefulness.[5] There is concern, for instance, that the focus on individual resilience and those who possess its traits could stigmatize those who struggle to cope and are thus deemed "non-resilient." Nevertheless, the American Psychological Association embraces the concept, defining resiliency as "a process of adapting well when encountering adversity, trauma, tragedy, threats, or significant sources of stress including workplace, family and relationship stress."[6] The Preventing Violence Across the Lifespan Research Network (PReVAiL) (an international research collaboration funded by the Canadian Institutes of Health Research's Institute for Gender and Health and the Public Health Agency of Canada) defines resilience as "a dynamic process in which psychological, social, environmental, and biological factors interact to enable an individual at any stage of life to develop, maintain, or regain their mental health despite exposure to adversity."[7] This definition captures the dynamic nature of individual resilience, which can be acquired,

lost, and regained, and is influenced by multiple factors.[8]

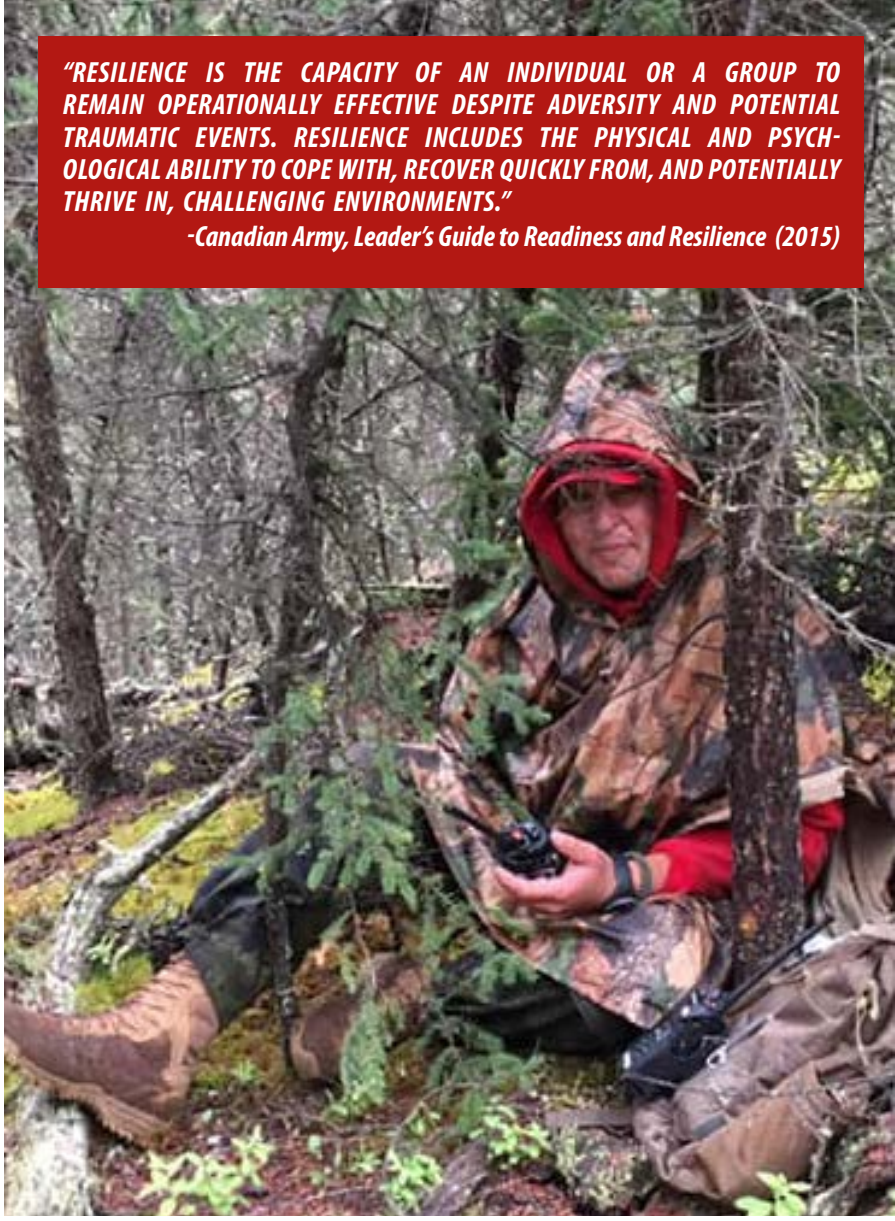
Resilience is "ordinary, not extraordinary."[9] People demonstrate resilience all the time. Psychological characteristics that have been tied to resiliency in the face of stress or adversity are: adaptability and flexibility, a positive outlook, openness to experience, emotional stability, self-esteem, coping by humour, problem solving, planning and decision making, communication skills, hope, creativity, and goal orientation. Social or group characteristics tied to resiliency include close relationships with family and friends, social networks, community engagement, and social support that can provide tangible assistance, advice, and emotional support. The research on individual resilience highlights the importance of supportive and caring relationships that an individual can draw upon, which provide love and trust, positive role models, and serve as a source of encouragement and reassurance. Resilience-building initiatives focus on helping people make connections, improve their self-esteem, embrace a positive outlook, and develop strategies on how to navigate problems, accept change, set goals, and learn from past issues, challenges, and/or failures.[10]

The Canadian Armed Forces' approach to individual or psychological resilience mirrors the basic definitions and highlights many of the characteristics listed above. The Canadian Army's *Mission: Ready – Leader's Guide to Readiness and Resilience* defines resilience as "the capacity of an individual or a group to remain operationally effective despite adversity and potential traumatic events. Resilience includes the physical and psychological ability to cope with, recover quickly from, and potentially thrive in, challenging environments. Resilience applies in garrison, in training, during operational deployments and in an individual's personal life."[11] The Army's *Leader's Guide to Resilience* emphasizes individual, family, unit, and community factors that affect resilience:

- **Individual-level factors** that affect resilience include skills such as using positive coping (e.g. active, problem-focused or spiritual approaches); maintaining a positive affect and thinking; having realistic expectations, self-esteem and self-efficacy; maintaining behavioural control; regular physical fitness; and being altruistic.
- **Family-level factors** that affect resilience include: the establishment of close emotional ties; communication skills to facilitate exchange of thoughts, opinions, or information, problem-solving and relationships; support, closeness, nurturing, and parenting skills, and adaptability to changes associated with Army life.
- **Unit-level factors** that affect resilience include a positive command climate which facilitates

"RESILIENCE IS THE CAPACITY OF AN INDIVIDUAL OR A GROUP TO REMAIN OPERATIONALLY EFFECTIVE DESPITE ADVERSITY AND POTENTIAL TRAUMATIC EVENTS. RESILIENCE INCLUDES THE PHYSICAL AND PSYCHOLOGICAL ABILITY TO COPE WITH, RECOVER QUICKLY FROM, AND POTENTIALLY THRIVE IN, CHALLENGING ENVIRONMENTS."

-Canadian Army, Leader's Guide to Readiness and Resilience (2015)



interactions, builds pride/support for the CA, unit and mission, where leadership provides positive role-modeling, and teamwork and cohesion are promoted in order to sustain commitment to each other, the mission, and a military ethos.

- **Community-level factors** that affect resilience include the development of a sense of belongingness which includes participation in spiritual/faith-based organizations, social groups; building community bonds and connectedness and a perception of collective efficacy.[12]

The Army gauges resilience through six "domains" (physical fitness, emotional fitness, social fitness, spiritual fitness, intellectual fitness, and familial fitness), each of which has a set of key performance indicators.

We do not attempt to formally assess each of the Army's performance criteria for their GBA+/ cultural suitability or their applicability to the Canadian Rangers as a distinct sub-component of the Army Reserves. For example, unlike Regular and Primary Reserve Force members, Rangers are exempted from meeting the minimum operational standards related to universality of service, including the operational standard for physical fitness.[13] Accordingly, the application of common physical fitness criteria to individual Rangers is questionable, given their unique terms of service, wide age profile, and the determinants of health in Northern Canada. Other domains resonate with our conversations

OPTIMAL	NORMAL	REDUCED	DISTRESSED
1. Engages with one's life's meaning and purpose.	Maintaining one's life's meaning and purpose.	Losing one's sense of life's meaning and purpose.	Believes life has no meaning or purpose.
2. Integrates morals, core values and beliefs.	Exploring morals, core values and beliefs.	Disregarding morals, core values and beliefs.	Abandons morals, core values and beliefs.
3. Hope-filled about life and future.	Maintaining a sense of hope about life and future.	Having very little hope about life and future.	Hopeless about life and future.
4. Able to forgive self and others.	Seeking to forgive self and others.	Unwilling to forgive self and others.	Unable to forgive self and others.
5. Recognizes and respects the value of others and diversity in beliefs.	Understanding of others and their beliefs.	Disregarding others and their beliefs.	Disrespectful of others and their beliefs.
6. Cultivates positive relationships and a sense of belonging.	Maintaining positive relationships and a sense of belonging.	Having few positive relationships and little sense of belonging.	Destroys relationships and isolates themselves.
7. Connected to one's world view and/or what one believes is Sacred.	Engaging with one's world view and/or what one believes is Sacred.	Disengaging with one's world view and/or what one believes is Sacred.	Disconnected from one's world view and/or what one believes is Sacred.

FIGURE 7-1: Canadian Armed Forces Spiritual Fitness Performance Continuum

with Rangers, such as an emphasis on familial health. Ranger participants in one focus group emphasized how family ties reinforce a feeling of unconditional acceptance and belonging, which draws people back to remote communities. Furthermore, there are many situations where multiple family members (grandparents, partners, siblings, children) are active in the Canadian Rangers, as well as many examples where youth are "brought up" through the JCRs and, in time, become Rangers. The spiritual fitness performance measures (see figure 7.1) also appear to resonate across ethno-cultural and gender lines, although a formal study of the applicability of these Army readiness and resilience factors to the Canadian Rangers would be required to draw any firm conclusions.

Metric of Success: Particularities associated with Canadian Ranger service are acknowledged and accounted for to ensure that the unique risks of Canadian Ranger training and employment are managed fairly and effectively.[14]

7.2 HEALTH

As the ASI report notes, the concept of individual health includes both physical and mental conditions. When devising social indicators, measures usually reflect "the most tractable manifestations ... of physical ill health such as incident counts for specific kinds of illness, injury, or death." Although assessing mental health is often more difficult than physical health, "observable proxies" include rates of suicide, teenage births, substance abuse, smoking, and crime (especially violence and domestic abuse). Other common measures include obesity, divorce rates, and school completion rates.[15] In a Northern Canadian context, however, applying many of these measures without cultural context can be problematic. Other health-relevant conditions include health infrastructure, sanitation, nutrition, behaviour, social problems, and disease.

Measuring the comparative health of Canadian Rangers to the general population, or even over the course of service, is complicated on various levels. First, Defence Administrative Order and Directive (DAOD) 5002-1 states that, upon enrolment, a Canadian Ranger must be physically and psychologically fit to perform foreseeable duties, and that a medical examination is not required.[16] Accordingly, because Rangers are not subjected to standardized individual health checks upon enrolment (as are other members of the CAF), there is no formal benchmark against which to assess or monitor their comparative fitness and health during their service. The measure of "physically able to continue performing their duties" is subjective, granting flexibility to individual Rangers, patrols, and 1 CRPG to interpret as they see fit. Furthermore, unlike all other CAF members, there is no compulsory retirement age for Rangers. Accordingly, the imprecision around the idea that a Ranger can continue to serve as long as they are physically and mentally capable of doing so (and that their patrol agrees this is the case) allows for forms of service that accommodate different circumstances and the unique social and physical environments in which Rangers live and operate.

While systematic data on personal health and fitness could be collected from Rangers through self-assessments or self-identification of specific health problems, we concur with the DND/CAF Ombusdman that there is no need to formally assess or monitor the overall fitness of Rangers beyond the informal methods of monitoring that already exist at a patrol level. Many Rangers might perceive the formal collection of data on smoking, alcohol and drug consumption, rates of physical activity, and diet as intrusive and even offensive. Furthermore, as the Ombudsman reported:

> Members of the chain of command and Canadian Rangers alike indicated that, while not a perfect system, the current practice with respect to the assessing and monitoring of Canadian Rangers' fitness works well overall. The lack of formal monitoring, reporting mechanisms and tracking for health and fitness provides leadership with the flexibility to enrol and assign tasks to Canadian Rangers based on factors not limited to their physical abilities. The absence of a baseline medical assessment does not affect access to Canadian Armed Forces health care entitlements or related benefits: eligibility is solely determined by type of service being performed at the time of illness or injury, and not by the pre-existing state of Canadian Ranger's health.[17]

Accordingly, we do not recommend trying to systematically collect Ranger-specific health data for the purposes of measuring organizational "success." Instead, 1 CRPG staff and Ranger Instructors should have a strong awareness of health indicators (including the social determinants of health) at territorial and community levels that are available through existing government and academic population surveys when they are making decisions that affect individual Rangers.

Indicator of Capacity: Informal monitoring of the health and fitness of Rangers is conducted at the patrol level, with due consideration for age and other variables, and accommodating diverse forms of Ranger service that "promote, from an educational or administrative perspective, the general efficiency of their patrol, the [Canadian Ranger] sub-component and the CAF."[18]

The CAF is responsible for providing health care to a Canadian Ranger when an illness or injury is attributable to his/her military service. In 2016, the Office of the DND/CAF Ombudsman conducted a systemic investigation into Canadian Rangers' access to health care entitlements and related benefits. This study uncovered various concerns about the lack of medical examinations for Rangers prior to enrolment, lack of awareness amongst Rangers about their entitlement to CAF health care treatment and employment benefits (including Veteran Affairs benefits for which Rangers injured on duty can submit claims), and a reticence of many Rangers to seek treatment at medical facilities outside of their communities. Furthermore, the Ombudsman report pointed out that "Canadian Rangers, similar to other Reservists, are failing to report or consistently track their illnesses and injuries." Reasons ranged from underestimating the severity of the injury, fear that they would be removed from participating in a particular activity, or fear of long-term career implications.[19]

Indicator of Capacity: Rangers report illnesses and injuries to 1 CRPG headquarters and these are processed and recorded appropriately.

Indicator of Capacity: Rangers are aware of the health benefits available to them as Reservists.

The decision not to impose an age cap or strict medical conditions on Ranger service can lead to confusion. Overzealous media stories in 2015 suggested a crisis in the organization because forty Rangers had died while serving in 1 CRPG from 2012-15. These stories revealed more about the reporters' lack of awareness about the

Ombudsman's Office Recommendations to the DND/CAF:

> **Recommendation 1:** eliminate ambiguity and inconsistency in language in the policy framework for Reservists, with a focus on health care entitlements….
>
> **Recommendation 2:** ensure compliance with the existing illness and injury reporting process so that Canadian Rangers are not inadvertently barred from accessing their health care entitlements and related benefits.
>
> **Recommendation 3:** ensure the delivery of health care to Canadian Rangers to which they are entitled by:

3.1 Engaging with Canadian Rangers with the view of identifying the barriers to their access to Canadian Armed Forces health care, and their health care needs within their social and cultural contexts.

3.2 Identifying and implementing a service delivery model for Canadian Armed Forces health care that is responsive to the identified needs of the Canadian Rangers.

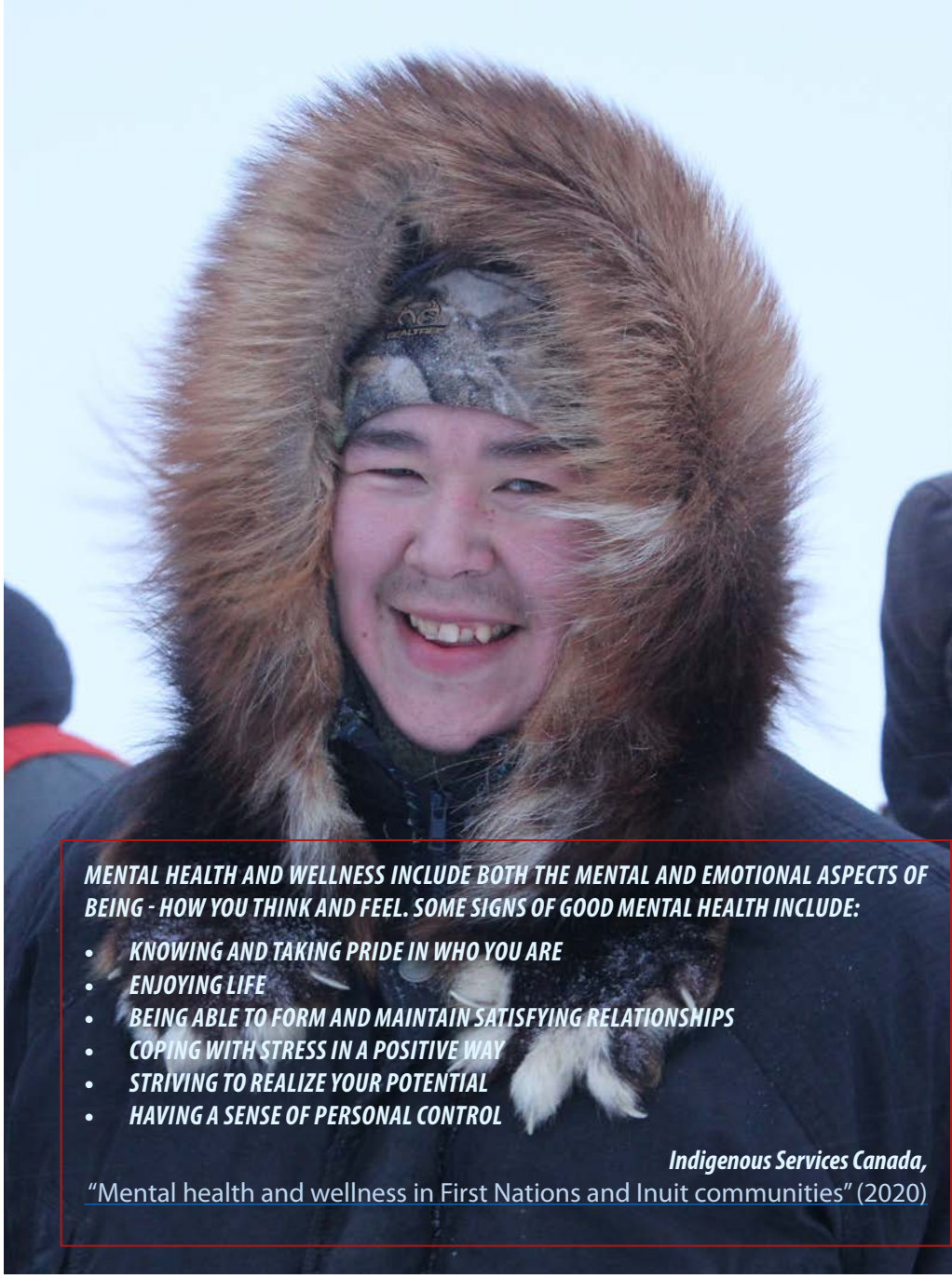
> **Recommendation 4:** take concrete steps to ensure Canadian Rangers have a clear understanding of the importance of reporting injuries, and to improve their knowledge and awareness of the health care entitlements and related benefits available to them by:

4.1 Amalgamating information on Canadian Ranger health care entitlements and related benefits; distributing this information to Canadian Rangers in various languages and formats as necessary…

4.2 Ensuring that this information is integrated into formal and any other relevant training offered to the Canadian Rangers….

Rangers and their unique terms of service than any so-called "crisis" in the organization.[20] While the tragic death of Ranger Donald Angoyoak of Gjoa Haven during Exercise Polar Passage in 2013 was operationally related and prompted Prime Minister Stephen Harper to remind Canadians how the Rangers and other CAF members face "real dangers as they safeguard Canadian sovereignty in the Arctic,"[21] the other thirty-nine Rangers had died due to non-duty related causes. Most passed away due to natural causes, including old age.[22] Although these deaths have a significant impact on the Rangers and their communities, the military does not have the ability to influence the number of Rangers who die of natural causes such as cancer, heart attacks, strokes, or old age for reasons that are unrelated to their Ranger service.

Metric of Success: Long-serving Rangers are publicly acknowledged for their dedicated service to their communities and to Canada, which not only bolsters individual self-esteem but also serves to enhance public understanding of Ranger service and reduce misunderstanding about deaths of elderly Rangers while still in service.



MENTAL HEALTH AND WELLNESS INCLUDE BOTH THE MENTAL AND EMOTIONAL ASPECTS OF BEING - HOW YOU THINK AND FEEL. SOME SIGNS OF GOOD MENTAL HEALTH INCLUDE:

- ***KNOWING AND TAKING PRIDE IN WHO YOU ARE***
- ***ENJOYING LIFE***
- ***BEING ABLE TO FORM AND MAINTAIN SATISFYING RELATIONSHIPS***
- ***COPING WITH STRESS IN A POSITIVE WAY***
- ***STRIVING TO REALIZE YOUR POTENTIAL***
- ***HAVING A SENSE OF PERSONAL CONTROL***

Indigenous Services Canada,
"Mental health and wellness in First Nations and Inuit communities" (2020)

Ranger participation can, however, influence individual decision making and promote health and wellness. Ranger focus group participants highlighted that drugs, alcohol, and bullying are a major problem in almost every community in the North. Substance abuse is weakening individuals and, by extension, their communities. Rangers articulated the importance of more extensive and culturally-appropriate educational programming on the harms of drug and alcohol abuse, as well as bullying, especially for youth. All participants suggested that these were major issues that need to be talked about more openly in their communities. One Ranger suggested that the problem did not stem from a lack of education about the harms caused by substance abuse, but poor education about how to cope with pain, sorrow, and "how to deal with reality." Individuals need to be taught how to deal with their problems and to talk about their problems with people whom they trust. They need to be taught how to deal with challenges because "life can be very hard and challenging for these kids and they need to be taught how to properly handle everything thrown at them." Drugs and alcohol explain some of these issues and exacerbate health problems. As one Ranger explained, people need to be "given good medicine."

Northerners emphasized the severity of mental health challenges in Arctic and Northern

communities at regional engagement sessions leading up to the *Arctic and Northern Policy Framework* (ANPF). This emphasis also reflects high rates of trauma amongst Northern Indigenous populations, including those flowing from assimilation programs and other legacies of colonialism.[23] Ensuring that individual Rangers have access to appropriate mental health supports, particularly after traumatic searches, accidents, or incidents, is important. The DND/CAF Ombudsman report noted that:

> Members of the chain of command and the Canadian Ranger community alike identified access to mental health services as problematic. The majority of the commanding officers interviewed recommended a review of the delivery of mental health services in this regard. In their support of Canadian Armed Forces operations, Canadian Rangers can be exposed to traumatic situations (for example, on Search and Rescue operations), and one senior leader stressed that "we need to have something in place to help them." The greatest challenge raised with respect to mental health was the lack of access to psychological support services within isolated and remote communities. Indeed, many national psychological service providers might not understand the context within which the Canadian Rangers work and live.[24]

Several Rangers emphasized similar points during conversations at the patrol level and during the Kitikmeot Roundtable on Search and Rescue held in Cambridge Bay, Nunavut, in early 2020.[25]

Indicator of Capacity: Rangers have access to culturally-appropriate and -sensitive psychological support services.

Unacceptably high suicide rates in Canada's Territorial North also have an impact on the Rangers, both directly and indirectly. Tremendous effort has been placed on identifying and addressing complex risk and protective factors to reduce suicide in the region. For example, the *National Inuit Suicide Prevention Strategy* sets out a series of actions and interventions to address the high number of deaths by suicide among Inuit. There is no evidence indicating that stresses related to Ranger service have any correlation with suicides, and some observers suggest that more military-supported activities, providing Northerners with a sense of purpose and self-worth, might actually play a positive role in reducing suicide rates. All of this remains speculative without more analysis. A specific study consolidating the extensive research that has been conducted on suicide in Northern communities, and mapping where the Rangers organization (and the JCR program) can contribute to developing individual resilience and prevention, may be appropriate.

Indicator of Capacity: Suicides and injury-related deaths of Rangers (currently serving and former) are tracked and compared with general territorial or regional rates.

7.3 MATERIAL WELL-BEING

The ASI defines material well-being in an Arctic context "as some measure of local residents' command over goods and services. That is, material well-being is not happiness or general well-being, but in its strict sense 'material.' It is a measure of what is consumed, not what is produced."[26] Rather than adopting this rather abstract definition, for the purposes of this report we focus more narrowly on Ranger contributions to material well-being in terms of the Arctic economy, paid income, and access to equipment that enables subsistence activities.

In general terms, the importance of the subsistence or traditional economy (which intersects with the conservation economy described in the ANPF), as well as high rates of transfers from the federal government to the territorial governments and Indigenous governments, differentiate the economies of Canada's Northern Territories from those of Canada's provinces. Eminent political scientist Oran Young notes that:

> Economic conditions in the Arctic present a paradox that has important implications for human development. In terms of [Gross Domestic Product] per capita, the Arctic has experienced considerable growth in recent decades. Yet Arctic economies are narrowly based and subject to great fluctuations driven largely by outside forces. In much of the Arctic, there is

> a dual economy in which one component is heavily based on extractive industries generating income and rents that tend to flow out of the Arctic and the other component primarily features a combination of subsistence activities and transfer payments from higher levels of government. The resultant dependence of Arctic communities makes it hard for individuals to sustain a sense of control over their own destinies. Increasing numbers of Arctic residents have come to depend on relatively low level jobs in volatile extractive industries and on transfer payments provided by outsiders....[27]

These observations are reflected in Canada's Northern Territories, and particularly outside of urban centres. There is no single Northern Canadian economy, however, and variations across regions and communities complicates the task of devising appropriate indicators of material well-being that apply to Rangers across 1 CRPG. Furthermore, decision-makers must factor high rates of social assistance, poverty, and food insecurity in parts of the Canadian North.

For Rangers with full-time wage employment jobs, Ranger pay enhances their material well-being as supplemental income, Equipment Usage Rate (EUR) compensation provides money to reinvest in equipment, and access to a Ranger rifle and an annual allotment of ammunition provides protection on the land and can support hunting. In areas with high wage employment rates (such as communities with ready access to jobs in the mining, forestry, or public sectors), Ranger activities must be scheduled well in advance and timed, where possible, to not compete with a Ranger's other job (or giving them sufficient notice to secure leave from it). In these cases, the military's efforts to reach out to employers to secure Rangers adequate leave and job protection as Reservists is highly relevant to an individual Ranger's material well-being, particularly when Ranger pay is often much lower per day than what these individuals earn in their full-time jobs.

Indicator of Capacity: Rangers have access to leave from full-time jobs to serve as Reservists.

For Rangers who do not have permanent wage employment (including those who are involved in the "informal," subsistence/traditional economy on a full-time basis), Ranger pay and reimbursements for the use of their personal equipment (discussed below) can represent a significant contribution to or proportion of their annual income. During our focus groups, some

"SUBSISTENCE ACTIVITY CAN BE DESCRIBED AS LOCAL PRODUCTION FOR LOCAL CONSUMPTION. A SIGNIFICANT NUMBER OF INDIGENOUS PEOPLE THROUGHOUT THE ARCTIC CONTINUE TO DEPEND LARGELY ON HARVESTING AND THE USE OF LIVING TERRESTRIAL, MARINE, AND FRESHWATER RESOURCES. MANY OF THESE RESOURCES ARE USED AS FOOD AND FOR CLOTHING AND OTHER PRODUCTS. THEY ALSO FIGURE PROMINENTLY IN THE CASH ECONOMY OF LOCAL HOUSEHOLDS AND COMMUNITIES."

Larsen et al., ***Arctic Social Indicators Report (2010), 51***

Rangers explicitly noted that the payment they receive for annual training or going on a Type 2 patrol represents a vital supplement to their income. For example, the Taloyoak Ranger patrol highlighted the high unemployment rate in their community and the positive impact that Ranger pay had on members of the patrol and their families. "When we get paid as Rangers, we spend this money in the community, it stays in the community," explained one Ranger. "We spend it on hunting and fishing gear, which we will use to get food, which we feed to our families and the community. This money is important."[28] During the focus group meetings, many Rangers noted the high costs of purchasing and maintaining vehicles and tools needed to hunt and fish to provide for their families and their communities.

Indicator of Capacity: Analysis of per capita Ranger income by patrol to see if there are community or regional disparities. Please note that this indicator has the benefit of "data affordability" in terms of time and resources, but it is silent on individual motivations and constraints.

Rangers emphasized the benefits of receiving money for the use of personal equipment and vehicles that they can use to (re)invest in new equipment. As noted elsewhere in this report, Rangers are paid for the use of their own equipment and vehicles such as snowmobiles, all-terrain vehicles (ATVs/quads), and boats during training and official taskings according to an established EUR. This arrangement provides Rangers with tax-free reimbursements that they can invest in their own equipment and tools, appropriate to their local environment, which they can then use in their everyday lives without having to ask the government for permission to do so. By allowing individuals to invest in their own, privately-owned equipment, this approach represents a material contribution to capacity-building. "There is lots more equipment in our community because of EUR," one Ranger sergeant observed. "This equipment is used for SAR, hunting, and First Nations events, not just Ranger activities."

If a Canadian Ranger's equipment breaks during an approved operation or task, they are entitled to compensation for loss of or damage to personal property. Because of the various factors described in the previous paragraphs, delays in reimbursing Ranger claims for loss of or damage to personal equipment can have strong implications. While snowmobiles, all-terrain vehicles (ATVs)/quads, boats, and trailers are often seen as "pleasure" vehicles in southern Canada, they represent essential means of transportation for many Northerners, especially those living outside of urban areas. Accordingly, loss of access to vehicles and equipment can have a serious effect on a Ranger's ability to pursue a subsistence livelihood or feed their family, and can reverberate throughout communities where country food is shared widely. Given high rates of unemployment, low per capita incomes of Indigenous Northerners, high costs of living, and limited local access to replacement parts (which have to be ordered in), a Ranger may not be able to afford to fix damaged equipment until they receive reimbursement.

During a focus group meeting in Cambridge Bay, Ranger patrol members also emphasized the enduring value of the annual allotment of ammunition that they receive as individual Rangers (which they can use for personal hunting and target practice), as well as the opportunities that Rangers have to practice their shooting. "Being a Ranger has helped me to shoot better, which has helped me to hunt better," one participant explained. This is an enduring theme, with Rangers often highlighting the value of having Ranger Instructors offer them advice on how to improve their marksmanship, fix their sights, and replace damaged weapons. There are also early indications that some Rangers have found the new C-19 rifle less robust and reliable than the .303 Lee Enfield Mark 4 which they had been issued since the late 1940s.[29] In this sense, considering a trusted Ranger-issue rifle as an indicator of individual resilience makes it important to carefully monitor the confidence that Rangers have in the C-19.

Indicator of Capacity: Ranger satisfaction with the new .308 C-19 rifle compared to the old .303 Lee Enfield, as well as frequency that they use the C-19 rifle for hunting.

7.4 EDUCATION

Mary Simon's 2017 report outlining A New Shared Arctic Leadership Model called upon the federal government to make education "the

cornerstone of the Arctic Policy Framework as the key to healthy people and social and economic progress," building upon her decades of advocacy for more culturally-relevant, adaptive, and flexible Inuit education. "Improving educational outcomes in the Arctic and supporting Indigenous languages to survive and thrive after years of destructive education policy is, at its core, the highest test of nation building," she suggested. Her recommendations focused on schooling for youth, Indigenous-language teaching, skills training policies and programs dedicated to the Arctic, and an Arctic university. These reflect conventional definitions of school-based education and skills training for wage employment for which standard measures (such as the proportion of students pursuing secondary diplomas/post-secondary degrees and completing their education) might be adequate to gauge "success."

Canadian Rangers in 1 CRPG have a wide range of formal schooling levels, from limited elementary schooling to graduate university degrees. In our research, we found no direct correlation between formal education levels and the ability to contribute meaningfully and substantively as a Ranger, given the diverse forms that Ranger service can take. In short, more formal education does not inherently make someone a better Ranger. Some Rangers within each patrol must be able to communicate with 1 CRPG headquarters using email and other technology, and some individuals must be able to fill out and submit forms in English to get pay and EUR for their Rangers. Not every individual Ranger needs to have a high degree of competency and comfort in writing, reading, or speaking multiple languages. In short, most conventional metrics of education have little applicability to measuring "Ranger success."[30]

Indicator of Capacity: Forms of Ranger reporting to headquarters are designed to accommodate diverse education levels and acknowledge that English is not a first language for some Rangers.

Expanding the definition from "formal" schooling to the benefits that individuals accrue from the "on-the-land" education provided through Ranger activities encourages a different set of metrics. Chapter 6 on Indigenous resilience has already highlighted how the Rangers act as a valuable conduit for cultural teachings and the transfer of land-based knowledge. One focus group participant explained that the absence of the Rangers "would accelerate the loss of traditional knowledge because people would not be out on the land as much as they are as Rangers." He described his patrol as the "vanguard" of keeping traditional skills alive and in "sharpening the axe" by ensuring that land skills are passed down from generation to generation. As an example, one Ranger highlighted an igloo-building activity between Rangers from Pangnirtung and Qikiqtarjuaq during Exercise KI TIT TUT (conducted to practice Ranger skills in a winter environment and to develop interoperability amongst patrols on Baffin Island and with the Royal Canadian Air Force) in 2017. Lackenbauer has observed countless examples of practices over the last two decades that encourage the sharing of skills within and across Northern cultures, both inculcating pride in local and traditional knowledge and skills and representing a form of adult education or life-long learning.

During our April 2019 visit to the Kitikmeot region, Rangers in the Gjoa Haven, Taloyoak, Cambridge Bay, and Kugluktuk patrols placed a strong emphasis on the sharing and transmission of traditional knowledge/skills. A Ranger patrol facilitates this process by bringing different generations together to learn from one another, and by providing the opportunity to get out on the land as a group. In Taloyoak, a Ranger noted: "Without the Rangers, a lot of these young guys wouldn't get the chance to learn from some of the older ones who are really good on the land. Years ago, these older guys would have shared their skills with everyone, passed along their knowledge, but they have less of a chance to do that these days. The Rangers lets them pass along all of this to the younger people, who will then be able to pass it along to the next generation, and then to generations down the line." Another Ranger explained: "In my culture, you don't just teach people, you watch and learn. You watch a camp being set up and then you set it up. You watch a kamotik being built and then you build one. You need to learn through action. The Ranger patrol gives us the chance to do this."

The Ranger organization provides individuals with access to leaders with other skill sets and the opportunity to develop them. Various Ranger leaders expressed frustration or concern that they were "not getting challenged enough in recent years." Examples included the arbitrary imposing of a 100-km geographical restriction on community-based training which, some patrol commanders believed, "hindered our ability to keep Rangers engaged."[31] During our Kitikmeot outreach trip, Rangers in each community insisted that they want more training opportunities and want Ranger Instructors to "push" them more during annual patrols, insisting that they not be "held back." In Gjoa Haven, a Ranger commented that, in the past, Ranger Instructors seemed to care more and tried to teach the patrol more. He explained that there would be an audience for whatever training 1 CRPG chose to provide to the patrols, but that Rangers would particularly like training in first aid, search and rescue, and airstrip construction (all of which Rangers had applied in real-life SAR situations). In Taloyoak, the Rangers commented on how much they appreciated their Ranger training, but they complained that the time is often too short to learn skills such as first aid and how to effectively use GPS. Members of the Kugluktuk and Gjoa Haven patrols suggested that the Instructors did not provide as much as they used to. Furthermore, sometimes the training was out of order or did not make sense, Kugluktuk patrol commander Sgt. Roger Hitkolok explained. "You need to know a lot of things before learning other things."[32]

Metric of Success: Challenging, practical training is provided in a manner that is culturally attuned, well sequenced, and proportionate to the strengths and limitations of individual patrols.

7.5 CONTACT WITH NATURE

The ASI report notes that Arctic residents often assert their connection to the land as a key element of well-being. "This well-being includes both the physical dimension of harvesting country food and recreational activities," it highlights, "and the more cultural and spiritual elements of communing with nature while pursuing such activities."[33] Most Rangers' stories are about experiences "on the land," whether epic trips by snowmachine or dog sled, encounters with polar bears or other animals, survival stories, or recollections about traditional forms of life and subsistence. For Rangers, time on the land is more than simply travelling to new places, improving their navigation skills and marksmanship, or harvesting food to feed themselves and their families (with the military footing the bill). It is also about social connections, a sense of identity, and spiritual replenishment. As a Ranger once told Lackenbauer, what binds the diverse organization is a "common love for the land" – an emotional attachment that can mean different things to different people, but is inextricably tied to a sense of place.

By encouraging individuals to go out on the land, patrol areas around their communities, and exercise their skills, Ranger service reinforces individual resilience, situated knowledge, and connectedness to place. "Town life has made things very easy in some ways," one Ranger explained. "We have furnaces, running water, indoor plumbing, grocery stores – things are so easy, that we very easily lose some of our strength." During that focus group, most of the

Rangers around the circle agreed with this statement. In town, it is easy to grow complacent and to lose the strength and ability that parents and grandparents once exuded. "Once that strength is gone it can be hard to get it back." Rangers highlighted that this made getting out on the land so important, especially for youth. Being out on the land "is so different from town life," one Ranger explained. "It is about survival. Nothing is easy, at least not without practice. This is a good way to help a person grow strong." Individuals need that strength to overcome adversity and to succeed.

While discussing the importance of culture and traditional knowledge, for example, participants in one focus group stressed the value of spontaneity and flexibility. People need to be able to "react to the land" immediately and effectively, one Ranger explained. If caribou or other game are spotted, people need to be able to go out and catch them at a moment's notice. This requires experience, skill, and a level of comfort that only comes from time spent on the land practicing the essential skills. It also requires that a person has ready access to equipment at a moment's notice. Through the Canadian Rangers (and the Junior Canadian Ranger program), people develop skills, build confidence, and acquire and maintain equipment so that they are prepared for immediate action. One participant noted that this ability to be "spontaneous" can also save lives in emergency situations, such as a fire or a flood, and that the Rangers should encourage and sustain this "mindset."[34]

Many Rangers highlighted that culture, tradition, and time on the land are especially important for youth (which includes young adults serving in the Rangers). They need to travel to camps, hunt, and fish. They need to be taken out of the town setting on a regular basis and given the opportunity to experience their traditions and culture. In the town, they regularly confront drugs and alcohol, bullying, and boredom. Many Rangers suggested that youth are too attached to their phones, to Facebook, and social media, which is unhealthy. They need to get out on the land and away from the technology that often leads to destructive behaviour. As one Ranger put it, youth need to be "brought out of service" and onto the land where they can participate in healthy activities.

"AS AN INUK, I GO OUT ON THE LAND – RETURNING HOME, I FEEL MORE HEALTHY."

Ranger at the 1 CRPG JCR Patrol Commander Leadership Meeting, Yellowknife, 18 January 2019

7.6 CULTURAL WELL-BEING AND CULTURAL VITALITY

A sense of cultural well-being and vitality is connected to a notion of belonging, of feeling comfortable living in a community and region, and of being accepted for their sense of identity. Individual Rangers must feel that they are free to practice and celebrate their cultural traditions, beliefs, and values. In turn, a sense of cultural security or well-being allows them to acknowledge and respect cultural differences in others. The notion that Rangers are "trained upon enrollment," and that the military values the cultural knowledge and training that they bring with them, serves as a source of positive affirmation of their identities. Previous chapters provided various examples of how Rangers reinforce collective and community resilience that build upon that of individual members. By enhancing the intergenerational transfer of cultural knowledge, facilitating access to cultural networks that allow individuals to gain on-the-land experience in their local environments, and providing material supports to land-based activities, Ranger service can support and enhance cultural well-being and vitality.

Ranger participants in all the focus groups emphasized that culture and traditional and local knowledge are at the foundation of a strong and healthy community. They need to practice skills that allow them to survive and thrive on the land – such as hunting, fishing, trapping, sewing, and building shelter. They need to hunt and eat country foods, and they need the opportunity to share that food with elders and other community members. Whenever they can (and especially when on the land), Rangers emphasized that Indigenous people should be encouraged to speak their traditional languages. They need to listen and learn from the stories of their elders. A person needs all these things to be strong, positive, and healthy.

The Canadian Rangers organization is built around the idea that individuals who retain cultural autonomy (and are not assimilated into conventional military culture at the expense of their own) bring special skills and value to the Canadian Armed Forces. Given the diversity of the Territorial North, it is important that 1 CRPG adopt a general definition of culture that is not derived from a single cultural group or people. "A flexible, culturally-sensitive approach and a willingness to become acclimatized to the ways of diverse groups of people are … essential," Lackenbauer observed in a 2006 article framing the Rangers as a "post-modern" military organization predicated on inclusiveness and acceptance. "Most instructors stress that mutual learning, credibility and trust are crucial to effective relationships with patrols."[35] Rangers and Ranger Instructors regularly highlight how training frameworks that accommodate different forms of delivery, and that are attuned to diverse audiences, are more effective than a standardized curriculum delivered as it is to other CAF audiences. As Magali Vullierme highlighted in a recent study, the active support of Northern communities for the Canadian Rangers (and for the JCR program) reflects how it is seen as a way to reinforce agency rather than acting as a tool of assimilation of Northerners into southern military norms.[36]

In Kugluktuk, Ranger Sgt. Roger Hitkolok (who has been a Sergeant for two decades) also highlighted the role of the Rangers in teaching the younger generations how to function on the land, but also how to function within society. He emphasizes his role as a trainer of the Rangers in his patrol:

"We have people in the patrol who are very good, and some who need more experience. Some have forgotten how to build an igloo or that you can survive off caribou skin if you have to. You need to give the Rangers a hard time sometimes, make them practice in weather or land they aren't used to, make them lead the patrol in bad weather. The people with a lot of time on the land train those who don't have as much. Our young fellas know how to travel on the land, but sometimes they don't know how to do it over long distances, and they lose their minds a little. I train them to listen to me and I put them through hard times. In a blizzard, I have told a Ranger he had to lead now, it's up to him. This teaches them how to travel safely. When the Ranger did this in the blizzard, he came back and told me, 'I feel so good.' Only way for them to learn, is to make them lead. It can't be the same people all the time, everyone, men and ladies, have to lead. We use our GPS all the time, and it helps, but we have to rely on our traditional knowledge – it is what lets us travel safely. Snow drifts don't lie – and so this is why I teach the Rangers the traditional ways. I teach my Rangers to constantly be on the watch, it is the only way to be safe here. So I give them a hard time a little bit, because sometimes it is hard up here."

"When we do activities in the community, I teach the Rangers to be respectful. They need to lead in community events. Be respectful always. At the Remembrance Day event, I tell them not to laugh or joke, need to be respectful."

"I meet with my corporals all the time, and we talk about things. I prepare them for when I am away. I meet with my MCpl every other day just to chat about things."

"We try to do things the right way. Sometimes we as a patrol have to make changes. We have to change how we do things. We have to get all of the Rangers together because we can't change things ourselves. We try to get everyone to understand and agree."

"We train people ourselves, that is important. Even the young JCR. We make them look for things on the land, let them do things on the land themselves. We make them find things, teach them how to use maps, not to rely on GPS. We teach them safe boating."

"I am always thinking of their safety. We have to do things right."

7.7 FATE CONTROL

A person's sense of their ability to guide their own destiny, or "fate control," is an outcome of empowerment. Simon, in proposing her new shared Arctic leadership model in 2017, noted that:

> A significant number of conversations I had with leaders and other stakeholders [in Inuit Nunangat] circled back to a central premise: healthy, educated people are fundamental to a vision for sustainable development…and fundamental to realizing the potential of land claims agreements, devolution and self-government agreements. While this may seem obvious, I kept returning to two vexing questions:
>
> 1. Why, in spite of substantive progress over the past 40 years, including remarkable achievements such as land claims agreements, Constitutional inclusion and precedent-setting court rulings, does the Arctic continue to exhibit among the worst national social indicators for basic wellness?
> 2. Why, with all the hard-earned tools of empowerment, do many individuals and families not feel empowered and healthy?[37]

This sense of empowerment and fate control is felt collectively and also by individuals who have confidence in their ability to make appropriate choices, act upon them, and realize desired outcomes.

The ASI Report explains that Northerners "who feel they are unable to control their own destiny, whether political, economic or along other axes, also may feel anomie. Those feeling empowered to control their fate are more likely to take actions needed to better their situation."[38] Extensive research shows how colonial and neo-colonial relations eroded Northern Canadians' sense of fate control.[39] While Canada has made significant advances in implementing innovative governance models at the local, Indigenous, and territorial levels that include land claim and self-government agreements and co-management regimes, many Northern Canadians still feel the impacts of externally-imposed control

and reduced autonomy. "In small northern settlements, local people could not escape the impression that they were watching helplessly while things were being done around them and supposedly for them," the ASI report summarized. "The feelings of estrangement caused by the loss of control over changes in turn contributed to the rise of social problems, such as suicide, violence, law-breaking, and alcohol abuse."[40] The "by Northerners, for Northerners" mantra that animates the Arctic and Northern Policy Framework and many territorial and Indigenous government strategies reflects a deliberate focus on locally-adapted and locally-driven solutions rather than distant colonial ones.[41]

Ranger Sergeant John Mitchell of Dawson observed during Operation KIGILIQAQVIK RANGER in 2002 that "the Rangers are one of the things that link the whole North." During that same enhanced sovereignty patrol from Resolute to the Magnetic North Pole (close to Isachsen at that time), Sergeant Darrel Klemmer of Tulita explained that "You get 30 different Rangers together and they'll have 60 different ways of doing the same thing. But we talk about our families and our communities and tell stories of the old ways. Everybody has hunting in common."[42] Lackenbauer has heard these ideas reiterated time and again over the past two decades – that, despite diverse backgrounds, Rangers are bound by a common "love for the land" and for their communities. Given the complexity of Northern issues, there can be no "one-size-fits-all" approach, and adaptability borne of experience and faith in one's knowledge, judgment, and creativity in the face of adversity is essential.

Our discussions with Rangers confirm a strong sense of confidence that their service and skills are highly valued. Rangers in each of the patrols that we visited expressed a strong sentiment that Rangers recognize that they make important contributions to the safety and security of their communities, both as individuals and as a group. "Rangers are the eyes and ears of the military and of the people.... We protect our communities," a patrol member in Taloyoak noted on 15 April 2019. Three days later, a Ranger in Cambridge Bay explained: "Going out with the Rangers, whether it be for annual training, or to check the DEW line [North Warning System] sites, lets us get out of the community and

"I JOINED THE RANGERS TO GIVE BACK TO MY COMMUNITY AND TO GIVE BACK TO CANADA."
Sergeant Jorgan Aitaok, Cambridge Bay Patrol, 18 April 2019.

report on the changes, because there are a lot of changes happening, and people need to hear about them." This provides collective benefits, and affirms an individual's sense of purpose and fate control.

Early chapters have already covered various aspects of fate control. Rangers wield decision-making power in electing their own patrol leadership according to a decentralized model that affirms their suitability to determine who is best suited to lead their local patrol. Their ability to choose their own equipment and clothing also represents a form of fate control. The Army "can't provide us with equipment," a Ranger from Fort Simpson insisted. "We need to know our equipment, and work on it. You can't just polish up your equipment and take it off the shelf once a year [to use]. Kinda like the Rangers." He emphasized that "we are supposed to be lightly-equipped, and our furs are better than the stuff they give us anyway." Rangers liked the flexibility to choose their own clothing to wear on the land, as well as personal equipment that was tried, tested, and true to local conditions.[43] As Northerners, Rangers also represent a functional ability to exercise control over local areas or homelands and to exercise their rights to land and sea resources. Because of their particular knowledge of local and region-specific conditions, they are considered "trained upon enrolment" to serve in and around their home communities – and are not trained to deploy overseas or elsewhere in Canada.

A Ranger's resistance to proposed or imposed changes also can serve as an expression of fate control and a signal of their commitment to the health and vitality of the Ranger organization. As the ASI notes, "in broad terms, resistance might be seen as an indicator of lack of control, or as an indicator of an incipient stage in the evolution of empowerment."[44] In the past, for example, individual Rangers have responded to proposals to have the organization assume a more typical Primary Reserve combat-oriented role by threatening to resign. Furthermore, some Ranger patrol leaders are vocal in articulating critiques of problematic or unclear policies or practices at annual Ranger leadership meetings in Yellowknife and to Ranger Instructors who visit them at a local level. Forms of resistance include everything from threats to resign as Rangers if proposed actions are taken or enforced, refusal to go out on the land or conduct certain activities in conditions that they perceive as dangerous to Rangers or their personal equipment, or simply a quiet refusal to implement changes and instead "wait out" a Ranger Instructor or Commanding Officer in hopes that a successor will provide more satisfactory direction. Non-commissioned officers and officers in 1 CRPG should see these forms of resistance as expressions of concerns about priority issues which authorities must address. From an analytical point of view, these acts of "resistance" can serve as an indicator of fate control, both in terms of the perception that it is being threatened or as an assertion of control by an individual Ranger. Furthermore, Ranger "resistance" to proposed changes might be read as attempts to preserve the cultural integrity of the Ranger organization – particularly in a situation where a Ranger does not believe that a longstanding practice or relationship is "broken" but that, by changing it, someone may run the risk of straining or breaking proven ways of doing things.[45]

Assessing the "success" of the organization must also account for the intense pride that many Rangers feel in being associated with the organization and "wearing the Red Hoodie." Examples abounded during the focus groups: the many elders who continue to serve into their seventies and eighties; a Ranger who has terminal cancer but insists that he wants to be a Ranger until he dies; and the many Rangers who request to be buried in their Ranger uniform. Given the pride associated with Ranger status, there is also consensus that longstanding Rangers should be formally recognized for their service when they release. One Ranger described them as "veterans who served their country but never went to war." Another suggested that Rangers who retired after a long period of service be conferred the status of "Honourary Ranger" – a way to ensure that they are still recognized. As one patrol community from the High Arctic noted, not all of the Rangers who released were old, "and it is a good idea to have something for them" to recognize their service.

Following frequent appeals by Canadian Rangers seeking recognition for fellow Rangers who decide to honourably release/retire from the unit, 1 CRPG has notified patrol leadership

Derek Neary, "Ranger Ookookoo Quaraq has been protecting the land for 54 years," *Nunavut News North*, **23 August 2018.**

Ookookoo Quaraq has never tired of search and rescue training exercises and teaching younger Rangers how to build iglus so they can survive on the land.

He's been doing it for 54 years.

There were few Nunavut Rangers in 1964 when Quaraq enlisted to help address the need, he says. He was around 20 years old at the time.

Since then, he's been on multiple patrols to the North Pole.

"He's very proud of going there three times," interpreter Christine Ootova says. "He went (one time) on a sunny day and he said it was quite an experience for him."

The number of exercises has increased, the amount of equipment has grown and the technological advances have been numerous over those 54 years, Quaraq acknowledges.

"He prefers it today," Ootova says after asking him if patrols are better than in the past. "Sometimes it's really hard but he still is a Ranger and he enjoys what he does."

Something else that has changed over the decades is the weather, sometimes making travel by snowmobile and all-terrain vehicles more perilous.

"Climate change has really affected the North. The ice is starting to freeze later than it used to before and it takes longer for the ice to freeze (in the fall) now because of climate change," says Quaraq. "Now it's unpredictable. One day it would be clear blue sky and then all of a sudden it will be windy… We used to have endless, beautiful blue sky in Pond Inlet, now it's cloudier than it used to be."

Despite the danger, he's never come close to losing his life on the land, he says. The worst he's suffered was an injured back when he fell off his snowmobile.

In addition to a Commissioner's long-service award, Quaraq has earned the Canadian Decoration (4th Clasp), Special Service Medal with Ranger Bar, Queen's Diamond Jubilee Medal and the Canadian Forces Decoration, according to 1 Canadian Ranger Patrol Group.

How much longer will he serve?

> "There were a couple of times that he wanted to retire but he knows so much about the land and survival skills and they need an elder to guide them," says Ootova. "He wants to continue being a Ranger but he's not sure how long."

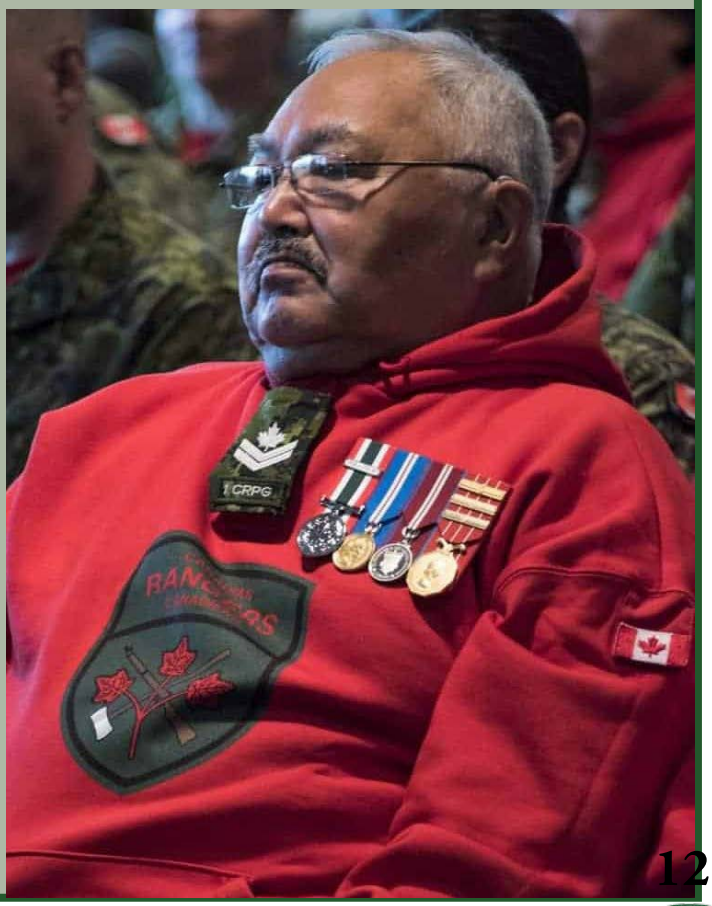


Photo: Canadian Ranger Ookookoo Quaraq has been a member of the Rangers' Pond Inlet Patrol since September 1964. He's a retired maintenance worker with the Department of Public Works. Master Cpl. Gerald Cormier, 3rd Canadian Division Imagery Tech photo

that it will support retiring Rangers with documentation associated with conventional CAF Depart with Dignity (DWD) practices effective 1 April 2020. Patrol leaders are expected to notify their Ranger Instructor when a Ranger has indicated their intention to release or retire, and the Instructor will request a unit certificate and other certificates from senior military or government officials (where applicable based on established military criteria). These will be provided to the Ranger patrol to present to the retiring member, ideally by someone from 1 CRPG Headquarters to demonstrate the military's formal recognition and appreciation.

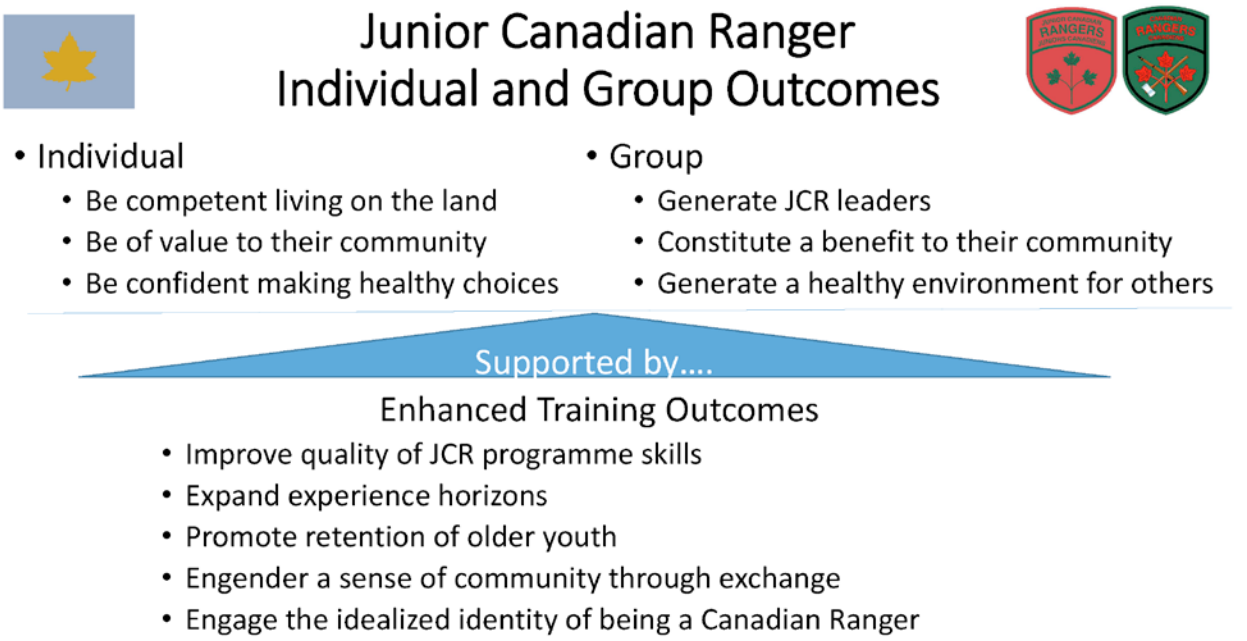
Metric of Success: Long-serving Rangers who release or pass away are recognized for their contributions.

7.8 THE JUNIOR CANADIAN RANGERS

> "The kids need people to look up to – role models – a lot, and they often look up to Rangers."
>
> - Ranger, Cambridge Bay, 18 April 2019.

During the focus groups, Rangers regularly referred to the need for self-reliant, respectful, confident, and responsible youths. "A strong community starts young," one participant concluded. Children and teenagers who have these traits will be stronger and healthier as individuals, which in turn makes the community stronger and healthier. Youth need access to programs that foster the development of these characteristics: traditional activities, sports, camps, other recreational activities. Several participants also highlighted the benefits that come with travel to other communities and other parts of the country. This travel helps to build awareness, open new possibilities, and improve self-confidence and self-reliance. All of our discussions yielded positive appraisals of the JCR program in fostering strong, healthy Northerners who contribute to their families, their communities, and their country. "These kids are the leaders of tomorrow," one Ranger sergeant explained, "so if we give them the right morals, they build community." Another Ranger described his pride in "watching JCRs buy their first firearm, and going to hunt safely to take care of their family and to protect their hunting parties." The program is intended to provide social support to people learning to cope with and overcome stress and adversity in their lives by improving cultural connectedness, encouraging community involvement, and providing tools for young people to reach their goals.

Promoting Healthy and Safe Experiences (PHASE) training is a major component of the JCR Life Circle of Learning and has direct correlations to the healthiness of youth and their communities. It provides Rangers in leadership positions vis-à-vis the JCR program with tools to talk about complicated and sensitive topics such as sexual harassment and abuse. PHASE training also helps leaders to know what to say when a young person approaches them with a difficult situation, and the curriculum is being updated


Junior Canadian Ranger
Individual and Group Outcomes
• Individual
• Be competent living on the land
• Be of value to their community
• Be confident making healthy choices
• Group
• Generate JCR leaders
• Constitute a benefit to their community
• Generate a healthy environment for others
Supported by....
Enhanced Training Outcomes
• Improve quality of JCR programme skills
• Expand experience horizons
• Promote retention of older youth
• Engender a sense of community through exchange
• Engage the idealized identity of being a Canadian Ranger

Measuring the Success of the Canadian Rangers

to include topics such as Cyber Bullying (with which adult leadership may not have personal experience). This training also promotes healthy living amongst the JCR leadership, premised on the idea that healthy leaders are strong leaders. Furthermore, it provides young people with access to support resources and adults outside their immediate family unit with whom they can speak and who can offer reassurance that they are not alone in dealing with their problems. Rangers emphasized the importance of youth having access to an adult whom they can trust. Accordingly, the JCR program must be measured on how it enhances youth resilience by promoting good physical and mental health, imparting life skills, and building social connections.

During our conversations, we were also struck by the number of Canadian Rangers (including many in leadership positions) who were previously Junior Canadian Rangers. While the JCR youth program is separate from the Rangers (a form of CAF Reserve service) and is not formally intended as a recruiting tool, several Rangers explained that they look to senior JCRs with strong land skills (or a dedicated interest in learning them), leadership qualities, reliability, and commitment as potential Rangers. There are many cases of former JCRs now serving as Rangers leading JCR patrols. Soupi Idlout in Resolute Bay (Qausuittuq), who "aged out" as a JCR and was immediately sworn in as a Ranger Master Corporal in fall 2019 to take over her community's JCR patrol, is a case in point. While producing Rangers is not a primary aim of the JCR program, it is an indirect benefit of helping to foster the talents and leadership of youth and thus serves as an indicator of trust in and respect for the Ranger organization.

Indicator of Capacity: Collecting statistics on the number of JCRs who become Rangers.

It is beyond the scope of this report on Ranger success to offer a holistic study of the JCR program and its myriad benefits. Accordingly, we recommend that conducting one would be beneficial to complement this study, the draft JCR Program Training Guidance and Doctrine manual circulated in fall 2019, and the 1 CRPG JCR patrol viability matrix developed in early 2020.

JCR PROGRAM VALUES AND PRINCIPLES		
Inclusion	Understanding	Equality
Cooperation	Safety	Culture
Sharing	Openness	Tradition
Respect	Responsibility	Diversity

BAFFIN

FINAL OBSERVATIONS AND NEXT STEPS

P. WHITNEY LACKENBAUER AND PETER KIKKERT

This report sought to identify a preliminary set of metrics and indicators to measure the success of the Canadian Rangers in 1 CPRG and also to support efforts to meet *Strong, Secure, Engaged* commitment 108 to "enhance and expand the training and effectiveness of the Canadian Rangers to improve their functional capabilities within the Canadian Armed Forces." With unique terms of service that allow them to strike an appropriate balance between military and community contributions, the Rangers are willing to share their local and traditional knowledge about lands and waters, whilst providing practical support for activities in what many southerners consider to be "extreme environments." We suggest metrics with direct resonance and relevance to the core military mandate as well as those that contribute to community disaster, community, Indigenous, and individual resilience.

"Rangers are not just the *eyes and ears* but also the *voice* of the military in their communities," Lackenbauer highlighted in his short history of 1 CRPG. "They represent an ongoing conversation about what is happening in remote regions, about how the military can best operate in the North, and about the importance of connecting considerations of sovereignty and national security to a strong sense of place."[1] As representatives of the North in all of its diversity, the Rangers are strong examples of how people come together to serve the greater good of their peoples, their communities, and their country. Rooted in ancestral ties to the land and deep local knowledge, Ranger service ensures that Northerners are key players in defence and security of their territories, and that military activities align with community and national interests. These are attributes that embed a CAF presence in the region firmly within the spirit of the *Arctic and Northern Policy Framework's* essential principle of "Nothing about us, without us" – a philosophy that "weaves federal, territorial, provincial and Indigenous … interests together for mutual success."

The integration of Rangers into the CAF reinforces broad-based respect for various forms of knowledge and the value of region-specific approaches to operations.

During interviews and focus groups, 1 CRPG members highlighted the diverse knowledge – technologies, skills, practices, and beliefs – that their communities have accumulated through people living in a particular environment over generations and that enable the community to achieve stable livelihoods in their environment. By embracing an appropriate mix of formal, informal, and adaptive knowledge systems, the organization not only serves as a "force multiplier" for CAF deployments into the region, it embodies the "for Northerners by Northerners" philosophy that animates recent federal policy, both representing and contributing substantively to Northern communities. The sustained commitment of the Ranger organization to Northern communities, its encouragement and development of local control, and its ability to leverage partnerships with other agencies and organizations represent an outstanding example of resilience building that the CAF should promote more vigorously.

While we have engaged in preliminary conceptual testing of the viability of various success indicators and metrics in this report, our intent was not to conduct a full, formal assessment or evaluation, which would require more time and resources. Instead, we propose an outcomes-based approach that seeks to measure benefits to the CAF, to Rangers, and to Northern communities. We also prioritized utility, relevance, and practicality over scientific precision or methods requiring elaborate data collection. In devising plans for tabulation or primary data collection to measure indicators or outcomes, we suggest deliberate efforts to focus on ease of measurement (can the data be measured in a simple and straightforward manner). We are also sensitive to data affordability: the ongoing costs of data collection and monitoring in an organization where human resources are already over-stretched, particularly in terms of Ranger Instructors and Human Resource Administrators. Accordingly, we have sought to propose indicators and metrics that 1 CRPG can measure at a reasonable cost through monitor mass (the CAF personnel database) and unit databases, with Rangers in focus groups at leadership gatherings, or by Ranger Instructors during their "Type 1" patrol visits to communities. Furthermore, we anticipate that measures

will change or be refined over time in light of continuing feedback, and adjustments to organizational plans, policies, practices, and goals.

Selecting and framing indicators must consider inclusiveness to ensure that they capture all people and groups represented in the Canadian Rangers organization (e.g. male, female, non-binary; Indigenous and non-Indigenous; Inuit, First Nations, and Métis; rural and urban). Our decision to analyze resilience in separate thematic chapters rather than as a blanket category (as we first attempted) also reinforces the need to assess Rangers' contributions through various lenses, contexts, and levels. We acknowledge that many of our indicators focus on Indigenous people serving in the Rangers (and Inuit in particular), which reflects the emphasis of Canadian Arctic and Northern policy, Canadian academic research, and the demographics of 1 CRPG (particularly in the NWT and Nunavut). Future work could discern how different Indigenous peoples represented in the Rangers would interpret "success" in fulfilling military and community roles, and whether the themes raised in this report resonate similarly with Indigenous and non-Indigenous communities.

Indicator of Success: 1 CRPG and its partners continue to discern how diverse Northern peoples and groups may have different interpretations of the Canadian Rangers "success" in fulfilling CAF and community roles.

Preliminary statistic analysis conducted by Jennifer Arthur-Lackenbauer and contained in a companion volume points to the Rangers as a highly representative organization. While 1 CRPG and DND/CAF more generally present most data related to the Canadian Rangers at the patrol group (regional) or national level, our findings point to the need for scalability: the need to measure various indicators at different geographical scales (patrol, region/zone, territory, patrol group, pan-Ranger). Our preliminary evaluation found that the most revealing findings were gleaned from community- and zone-level analysis.

8.1 PROPOSED NEXT STEPS

1. DETERMINE HOW TO CONDUCT PROPER TESTING AND VALIDATION OF THE PROPOSED INDICATORS, AS WELL AS IDENTIFICATION OF THOSE WE HAVE MISSED, WITH A BROADER ARRAY OF MEMBERS OF 1 CRPG, THE DEFENCE TEAM, AND NORTHERN STAKEHOLDERS.

Rather than seeing this report as a final product, we see it as an essential step in an iterative process that involves ongoing discussions with Canadian Rangers, Ranger Instructors, 1 CRPG Headquarters staff, "Team North," the Canadian Army, and other stakeholders. While *Strong, Secure, Engaged* appropriately focuses on how the military can "enhance and expand the training and effectiveness" of the organization to contribute to the CAF, we argue that its "functional capabilities" must also be assessed in terms of their contributions to communities and to individuals.

We acknowledge and respect that a lengthy written report, laden with academic and policy jargon, will not be attractive or accessible to some key stakeholders. Accordingly, with 1 CRPG consent, we will seek opportunities to share our findings in diverse ways with members of the Defence Team, the unit, and the Rangers themselves. This will include verbal briefings at Ranger leadership meetings and 1 CRPG indoctrination training sessions, "infographics," and other products suggested by stakeholders.

2. IDENTIFY WHICH OF THE INDICATORS THAT WE HAVE DERIVED FROM OUR RESEARCH WITH 1 CRPG ALSO APPLY TO THE OTHER CANADIAN RANGER PATROL GROUPS.

Lackenbauer's previous work highlights the tremendous diversity of the Rangers across Canada, which makes generalizing across the five Canadian Ranger Patrol Groups (CRPGs) difficult. Accordingly, we will request permission to share this report with the other CRPGs to see if our findings resonate with their headquarters staff and, ultimately, with Rangers across Canada.

3. CONDUCT A SIMILAR SCOPING STUDY TO MEASURE THE SUCCESS OF THE JUNIOR CANADIAN RANGER (JCR) PROGRAM IN 1 CRPG.

Focus group discussions with Rangers at annual leadership meetings of the JCR program, conversations during summer JCR Enhanced Training Sessions (ETS), and JCR Instructors all indicate a strong desire to develop more formal metrics to measure the "success" of the JCR program in 1 CRPG. With 1 CRPG support and consent, we will initiate this project over the next year.

4. CONDUCT A DETAILED STUDY ON WOMEN IN THE CANADIAN RANGERS.

What accounts for the high rates of female participation in the Rangers? Are their experiences and roles perceived as different from those of male Rangers, and how do their perspectives and voices fit within the professional development culture of the CAF?[2] We have discussed these questions with many Rangers during our research, but realized that a nuanced understanding of these dynamics requires a distinct study. Over the next year, Lackenbauer will conduct research on this theme with Captain Melanie Parker (1 CRPG), Dr. Magali Vullierme, Bianca Romagniola, and Ranger advisors, using funds provided through the North American and Arctic Defence and Security Network (NAADSN) and his Canada Research Chair in the Study of the Canadian North.

5. PRODUCE MORE ROBUST STATISTICS ON INDIGENOUS PARTICIPATION RATES IN 1 CRPG.

Data availability (in terms of whether it exists or is retrievable) proved a significant constraint in realizing our full aspirations for this project. The absence of reliable Canadian Army statistics on Indigenous participation rates in 1 CRPG was particularly limiting. Lackenbauer's systematic review of the unit nominal role, in conversation with Ranger leadership and Ranger Instructors, confirmed that Army self-identification statistics for 1 CRPG are highly problematic and that the unit is generally reflective of Northern diversity. A concerted effort to produce more robust statistics, based on a more appropriate methodology than that previously employed by the Canadian Army in its self-identification surveys, would allow 1 CRPG and the Canadian Army more generally to test assumptions about Indigenous participation rates and would support more evidence-based decision making. Rather than adopting a deficit approach to explaining the under-representation of Indigenous people in the CAF, the inclusion of Canadian Rangers in military participation statistics encourages a reappraisal of why the Canadian Rangers have become a career of choice for many Northern Indigenous people.[3]

6. CONDUCT A CAREFUL ASSESSMENT OF THE ACTIVATION OF THE CANADIAN RANGERS AS PART OF THE COVID-19 PANDEMIC RESPONSE IN NORTHERN COMMUNITIES.

Preliminary evidence from Operation LASER affirms that the Canadian Rangers are a strong example of how DND/CAF relationships can effectively build disaster resilience in at-risk, remote, and isolated communities with small populations, limited infrastructure and local resources, and little access to rapid external assistance. 1 CRPG and the Canadian Army should make a dedicated effort to consolidate lessons learned and best practices that might be applied in future public health missions and other emergency situations. This work must be conducted by analysts with a deep understanding of the unique challenges and constraints facing isolated Northern and coastal communities, Indigenous peoples, and the Canadian Ranger organization. Measures of effectiveness or "success" in other parts of the country may not be applicable or appropriate.

This report did not attempt to deal with other important issues facing the Canadian Ranger organization, such as the work-life balance and overall well-being of the Canadian Ranger Instructor cadre; proposed changes to the CRPG headquarters organizational structure to alleviate the workload of Ranger Instructors and enhance administrative support to Rangers and Instructors; or how CAF policies can be better aligned with the administrative and operational realities of the Ranger organization.[4] Furthermore, the response of the Canadian Rangers to COVID-19, which was ongoing when we completed drafting this report, should be evaluated systematically to discern lessons learned and best practices that might be applied in future

public health missions and other emergency situations. Like this report, this work must be conducted by analysts with a deep understanding of the unique challenges and constraints facing isolated communities, the Ranger organization, and "Team North" more generally.

7. CONDUCT A MORE THOROUGH ANALYSIS OF HOW THE CANADIAN RANGERS FIT WITH THE CANADIAN ARMY'S ARCTIC CONCEPT AND PLANS FOR NORTH AMERICAN DEFENCE MODERNIZATION.

Conversations with DND/CAF stakeholders after the circulation of an initial draft of this report indicate the need for concerted efforts to situate the Rangers more centrally and robustly within the Canadian Army's Arctic concept, and also to explore current or future roles that the Canadian Rangers could and should play pursuant to North American defence modernization (including the modernization of the North American Aerospace Defence Command /NORAD). This may help to inform future DND/CAF and Government of Canada investments in an expanded Arctic presence and Northern capabilities.

APPENDIX: DAOD 2020-2, CANADIAN RANGERS

1. INTRODUCTION

Date of Issue: 2015-05-21

Application: This DAOD is an order that applies to officers and non-commissioned members of the Canadian Armed Forces (CAF members).

Supersession: Chief of the Defence Staff (CDS) letter, *Revised – Role, Mission, Tasks of Canadian Rangers*, 11 July 2008

Approval Authority: Vice Chief of the Defence Staff (VCDS)

Enquiries:

- Commander, Canadian Army (Comd CA) (for force generation)
- Commander, Canadian Joint Operations Command (Comd CJOC) (for force employment)
- Chief of Staff Army Reserve (COS Army Res) as the Canadian Rangers National Authority (CRNA) (for Canadian Rangers (CR) policy)

2. OVERVIEW

ROLE OF THE CR

2.1 The CR is the sub-component of the Reserve Force (Res F) that provides a CAF presence in those sparsely settled northern, coastal and isolated areas of Canada which cannot conveniently or economically be covered by other elements of the CAF.

MISSION

2.2 The mission of the CR sub-component is to provide lightly-equipped and self-sufficient mobile forces in support of CAF sovereignty and other domestic operations.

LIABILITY TO SERVE

2.3 Under QR&O subparagraph 2.034(d), *Reserve Force – Sub-components*, the CR sub-component consists of CAF members who have undertaken, by the terms of their enrolment, to perform such military duty and training as may be required of them, but who are not required to undergo annual training.

2.4 A CAF member of the CR sub-component (CR member) is liable to perform duties of a military nature, including any duty involving public service, only:

if called out on service in an emergency under QR&O paragraph 9.04(3), *Training and Duty*; or

if placed on active service by the Governor in Council under section 31 of the *National Defence Act*.

2.5 Paragraph 33(2)(a) of the *National Defence Act* provides that a CAF member of the Res F (including a CR member) may be ordered to train for such periods as prescribed in regulations made by the Governor in Council.

Note – To date, no regulations prescribing periods of training for CR members have been made.

2.6 A commanding officer (CO) of a Canadian Ranger Patrol Group (CRPG) may authorize the attendance of a CR member on courses sponsored by the Regular Force (Reg F) or Res F.

3. ORGANIZATION

COMMAND

3.1 CR members are commanded by the:

- CDS through the Comd CA for force generation; and
- Comd CJOC for force employment.

COMPOSITION OF CRPGS

3.2 The CR sub-component is organized into five CRPGs. Each CRPG is a unit comprised of a headquarters (HQ) element and a number of CR patrols that are detachments of the CRPG. The officer appointed to command a CRPG is a CO.

CR PATROL

3.3 A CR patrol is a sub-unit comprised of CR members. The establishment structure of a CR patrol and the associated ranks of the CR members within a CR patrol are determined by the CRNA.

Creation and Location of a CR Patrol

3.4 The creation and location of a CR patrol are based on operational and national objectives determined in consultation with CJOC and the provisions of this DAOD.

3.5 A CR patrol is stood up, disbanded or relocated, as required, to:

- enhance CAF capability to fulfill the CAF mission;
- enhance local and domestic operational capability; and
- benefit the social fabric of Canada and the local community.

4. TASKS

CR TASKS

4.1 The tasks in the following table may be undertaken by a CR member on duty when authorized by their CRPG HQ:

TASKS	EXAMPLES
Conduct and provide support to sovereignty operations	• Conduct and provide support to surveillance and sovereignty patrols, including training in Canada. • Conduct North Warning System site patrols. • Report suspicious and unusual activities. • Collect local information of military significance.
Conduct and provide assistance to CAF domestic operations	• Conduct surveillance of Canadian territory. • Provide local knowledge and CR expertise (i.e. advice and guides). • Participate in search and rescue operations. • Provide support in response to natural or man-made disasters and support in humanitarian operations. • Provide assistance to federal, provincial, territorial or municipal government authorities.
Maintain a CAF presence in the local community	• Instruct, mentor and supervise junior Canadian rangers. • Participate in and support events in the local community (e.g. Yukon Quest, Canada Day, Remembrance Day, etc.). **Note –** When assisting with the conduct of the activities of the Junior Canadian Rangers' Programme, CR members are contributing to national goals of the Government of Canada by significantly improving the quality of life of junior Canadian rangers across the country, especially in the most isolated areas of Canada.

TASKS NOT ASSIGNED

4.2 The following tasks may not be assigned to a CR member, except when placed on active service under section 31 of the *National Defence Act*:

- undertaking tactical military training;
- performing immediate local defence tasks, such as containing or observing small enemy detachments pending the arrival of other forces;
- providing vital point security (e.g. dams, mines, oil pipelines, etc.);
- assisting federal, provincial, territorial or local police in the discovery, reporting and apprehension of enemy agents, saboteurs, criminals or terrorists; and
- serving in aid of the civil power.

5. PATROLS

UNUSUAL ACTIVITIES

5.1 In the course of their daily civil activities, a CR member may observe or be informed of unusual activities in their area, such as:

- the presence of an unknown ship or submarine;
- the movements of an unknown, low flying aircraft;
- the presence of unknown persons; or
- the flying of another nation's flag on Canadian territory.

5.2 CR members are encouraged to report information about any unusual activities to their CRPG HQ, even though they may not be on duty at the time they observe or are informed of the unusual activity or when they make the report.

INFORMATION GATHERING

5.3 CR members may be tasked to conduct patrols for the purpose of gathering information or for any other specified purpose. The following types of patrols may be conducted:

sovereignty patrols;

surveillance patrols; and

North Warning System site patrols.

5.4 Information collected and any unusual activities observed by CR members during any of the above patrols must be reported to their CRPG HQ including a report of the route taken during the patrol.

SOVEREIGNTY PATROLS

5.5 Sovereignty patrols are conducted to demonstrate that Canada is able to maintain a presence for a limited time anywhere asserted to be sovereign Canadian territory by the Government of Canada.

SURVEILLANCE PATROLS

5.6 Surveillance patrols are conducted as part of the systematic observation of Canada's air, land and ocean areas by all available and practicable means, primarily for the purpose of locating, identifying and determining the unusual movements and activities of aircraft, ships, submarines, vehicles and unknown persons.

NORTH WARNING SYSTEM SITE PATROLS

5.7 North Warning System site patrols are conducted to carry out an exterior and physical security inspection of a designated site. The CRPG HQ provides specific guidelines for the conduct of patrols to each type of site, whether:

- a short-range radar site;
- a long-range radar site; or
- an abandoned Distant Early Warning Line site.

6. ADMINISTRATION

ENROLMENT

6.1 DAOD 5002-1, *Enrolment*, sets out the conditions for enrolment in the CR sub-component.

PROMOTION

6.2 The substantive rank of a CR member is private. A CR member may only be promoted to a higher acting rank.

6.3 A CR member may be promoted to fill an establishment position within a CR patrol either:

- normally, by an elective promotion process involving the concurrence of their community and the approval of the CO of their CRPG; or
- by exception, solely on the authority of the CO of their CRPG.

PAY

6.4 Annual pay increments that apply for a CR member holding acting rank are set out in the applicable tables in *Compensation and Benefits Instructions for the Canadian Forces* (CBI) Chapter 204, *Pay of Officers and Non-Commissioned Members*.

6.5 A CR member is entitled to be paid when participating in training authorized by the CO of their CRPG or when the CR member is tasked by the CO of their CRPG to perform a duty. See the tasks for CR members in paragraphs 4.1 and 5.3.

6.6 CBI Chapter 204 sets out the applicable rates of pay for periods of duty or training of a CR member on Class "A" or "B" Reserve Service and for days of Class "C" Reserve Service.

CLASSES OF SERVICE

6.7 A CR member may serve on Class "A", "B" or "C" Reserve Service under Canadian Forces Military Personnel Instruction (CF Mil Pers Instr) 02/15, *Supplementary Reserve*.

CLASS "C" RESERVE SERVICE

6.8 Class "C" Reserve Service under QR&O article 9.08, *Class "C" Reserve Service*, for a CR member may only be authorized by or on behalf of the CDS. For the purpose of QR&O subparagraph 9.08(1)(*b*), a CR member is on Class "C" Reserve Service when the member is on full-time service and is serving on the following types of operations:

- a routine operation in Canada;
- a humanitarian assistance operation; and
- an operation involving the performance of any duty involving public service.

6.9 The Application block in DAOD 5023-1, *Minimum Operational Standards Related to Universality of Service*, provides that a CR member is not required to meet the minimum operational standards unless attached, seconded or transferred on consent to the Reg F or Primary Reserve (P Res). Therefore, when authorizing a CR member to be placed on Class "C" Reserve Service, approval authorities should note that the minimum operational standards in DAOD 5023-1 do not apply.

RELEASE PROCESS

6.10 A CO of a CRPG must process the release of a CR member from the CAF in accordance with Chapter 15 of A-PM-245-001/FP-001, *Military Human Resources Records Procedures*.

RETIREMENT

6.11 CR members do not have a compulsory retirement age and can serve as long as they are able to meet the requirements listed in paragraph 6.12.

6.12 To continue to serve, a CR member must be:

- physically able to continue performing their duties; and
- likely to promote, from an educational or administrative perspective, the general efficiency of their patrol, the CR sub-component and the CAF.

EMPLOYMENT RESTRICTION

6.13 A CR member must not be employed in any P Res position.

7. CONSEQUENCES

CONSEQUENCES OF NON-COMPLIANCE

7.1 Non-compliance with this DAOD may have consequences for both the CAF as an institution and CAF members as individuals. Suspected non-compliance will be investigated. The nature and severity of the consequences resulting from actual non-compliance will be commensurate with the circumstances of the non-compliance.

8. RESPONSIBILITIES

RESPONSIBILITY TABLE

8.1 The following table identifies the responsibilities associated with this DAOD:

THE ...	IS OR ARE RESPONSIBLE FOR ...
Comd CA	• ensuring the force generation of CR members for employment to meet operational requirements.
Comd CJOC	• determining the force employment requirements for the CR.
COS A Res, acting as the CRNA,	• developing CR policies; • carrying out CR personnel management, including administration, finance, training, equipment and supply; and • coordinating the structure and organization of the CR, including the formation and location of CR patrols. • notifying the VCDS of any non-compliance with this DAOD.
comds of land force areas and the Comd Joint Task Force (North)	• managing the CR members serving in their applicable areas of responsibility; • providing the interface between the strategic level, the Comd CA, the tactical level and the CRPG, in commanding the CR; and • providing guidance to CRPG COs.

9. REFERENCES

ACTS, REGULATIONS, CENTRAL AGENCY POLICIES AND POLICY DAOD

National Defence Act

QR&O article 2.034, *Reserve Force – Sub-Components*

QR&O article 3.295, *Command by a Member of the Canadian Rangers*

QR&O Chapter 6, *Enrolment and Re-engagement*

QR&O Chapter 9, *Reserve Service*

QR&O Chapter 11, *Promotion, Reversion and Compulsory Remustering*

QR&O Chapter 15, *Release*

CBI 204, *Pay of Officers and Non-Commissioned Members*

DAOD 2020-0, *Reserve Force*

OTHER REFERENCES

DAOD 2020-1, *Primary Reserve*

DAOD 2020-3, *Cadet Organizations Administration and Training Service*

DAOD 2020-4, *Supplementary Reserve*

DAOD 5002-1, *Enrolment*

DAOD 5023-1, *Minimum Operational Standards Related to Universality of Service*

A-PM-245-001/FP-001, *Military Human Resources Records Procedures*

CFOO 3685, *1 CRPG*

CFOO 3686, *2 CRPG*

CFOO 3687, *3 CRPG*

CFOO 3688, *4 CRPG*

CFOO 3689, *5 CRPG*

CF Mil Pers Instr 02/15, *Supplementary Reserve*

NOTES

Introduction

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24 On page 79, SSE explains that "NATO has also increased its attention to Russia's ability to project force from its *Arctic territory into the North Atlantic*, and its potential to challenge NATO's collective defence posture. Canada and its NATO Allies have been clear that the Alliance will be ready to deter and defend against *any potential threats, including against sea lines of communication and maritime approaches to Allied territory in the North Atlantic*."

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Chapter 3 : Military Metrics of Ranger Success

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8 Canadian Rangers Patrol Types Matrix for Operations and Employment, Annex A: Canadian Ranger Patrol Types Matrix.

9 Canadian Joint Operations Command's Commander's Guidance – Force Employment of Canadian Rangers, 23 June 2014. The Canadian Rangers Patrol Types Matrix for Operations and Employment, Annex A: Canadian Ranger Patrol Types Matrix, Task & Pay Authority, Type 5, Domestic Operations, notes that Class "C" Reserve Service will always be considered for Canadian Rangers who participate in life and limb Search and Rescue operations, at the authority of the Canadian Joint Operations Command (CJOC).

10 DND/CAF Ombudsman, "Canadian Rangers Tasks and Operations."

11 LCol L.C. Carvallo, 1 Canadian Ranger Patrol Group (1 CRPG) Operating Plan Fiscal Year 2018-2019, 15 May 2018.

12 Carvallo, 1 CRPG Operating Plan Fiscal Year 2018-2019.

13 1st Canadian Ranger Patrol Group Individual Ranger Task Standards and Collective Ranger Task Standards, issued on the authority of CO 1 CRPG, effective 8 February 2018.

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17 Hainse, Commander Canadian Army MID.

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49 Hainse, Commander Canadian Army MID.

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67 Schubert to Commander, JTFN, 22 October 2007. Northwest Territories had three communities with populations over 300 that could support Ranger patrols (Norman Wells, Hay River, and Yellowknife--Detah--N'Dilo) and two in Yukon (Watson Lake and Faro). New patrols were stood up in Faro (2011), Hay River (2011), Watson Lake (2011), and Yellowknife (Wiiliideh patrol centred on the communities of Dettah and Ndilo in 2019), and detachments established in Teslin (Carcross patrol), Wrigley (Fort Simpson patrol), Norman Wells (Tulita patrol), and Colville Lake (Fort Good Hope patrol) in 2018-19.

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69 BGen G.J.P. O'Brien, "Canadian Ranger Expansion Update," 20 April 2010, DND file 1920-1 (CRNA).

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71 Major Jeff Allen, interview with author, Yellowknife, NWT, 13 June 2011.

Chapter 4: Community Disaster Resilience and Search and Rescue (SAR)

1 We chose this definition because it has greater specificity than many conceptualizations of disaster in the literature. For instance, the U.S. Federal Emergency Management Agency (FEMA) defines disaster as, "An occurrence that has resulted in property damage, deaths, and/or injuries to a community." It further distinguishes between large- and small-scale disasters. A "large-scale disaster is one that exceeds the response capability of the local jurisdiction and requires State, and potentially Federal, involvement." FEMA, "Glossary of Terms." See A.C. McFarlane and F.H. Norris, "Definitions and Concepts in Disaster Research," in *Methods for Disaster Mental Health Research*, eds. F.H. Norris, S. Galea, M. J. Friedman, & P. J. Watson (New York: Guilford Press, 2006), 4.

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3 Some scholars use the term "small-scale" disasters to describe adverse situations that can affect small, remote, and/or rural communities. In comparison to large-scale disasters, the impacts of small-scale disasters are more localized and involve less people, a comparatively small number of casualties, and do not always entail massive financial loss. Nevertheless, small disasters can have a massive socio-economic impact on local populations. M.C. Marulanda, O.D. Cardona, and A.H. Barbat, "Revealing the Socioeconomic Impact of Small Disasters in Colombia using the DesInventar Database," *Disasters* 34/2 (2010): 552-70; Marulanda, Cardona, and Barbat, "Revealing the Impact of Small Disasters to the Economic and Social Development," in *Coping with Global Environmental Change, Disasters and Security*, eds. H.G. Brauch, Ú. Oswald Spring, C. Mesjasz, J. Grin, P. Kameri-Mbote, B. Chourou, P. Dunay, and J. Birkmann (Berlin: Springer, 2011), 575-84.

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Chapter 5: The Canadian Rangers and Community Resillience

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24 See, for example, Derek Neary, "Bart Hanna-Kappianaq survives seven days alone on the land after getting lost while hunting," *Nunavut News*, 6 October 2017.

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27 Kikkert and Stern, "Finding Ihuma."

28 Interview with Sgt. Roger Hitkolok, Kugluktuk, 22 April 2019.

29 One Ranger noted that this ability to be "spontaneous" also proves useful in emergency situations, like a fire or a flood. Another pointed out that this ability is really a "mindset" that must be created, strengthened, and sustained. Unfortunately, he explained, many community members are losing the ability to be spontaneous.

30 The focus group we conducted in Kugluktuk emphasized this point. By the end of the meeting, people were sharing traditional cultural stories, as well as stories about the patrol and its activities. Focus group with Kugluktuk Ranger Patrol, 23 April 2019.

31 Focus group with Kugluktuk Ranger Patrol, 23 April 2019.

32 1 CRPG Ranger Leadership Meeting, Yellowknife, 14 October 2018.

33 Focus group with JCR leadership, Yellowknife, 18 January 2019.

34 Focus group with JCR leadership, Yellowknife, 18 January 2019.

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45 P. Whitney Lackenbauer, *Vigilans: The 1st Canadian Ranger Patrol Group* (Yellowknife: 1st Canadian Ranger Patrol Group, 2015), 153.

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14 Canadian Army, *Leader's Guide to Resilience*.

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36 Focus group 1, 1 CRPG JCR Patrol Commander Leadership Meeting, Yellowknife, 18 January 2019.

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Chapter 8: Final Observations and Next Steps

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UR – upper right CR – centre right LR – lower right

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Measuring the Success of the Canadian Rangers

A REPORT PREPARED BY
P. WHITNEY LACKENBAUER AND PETER KIKKERT

This project on "Measuring the Success of the Canadian Rangers: Using Statistical Methods, Gender Based Analysis Plus, and Stakeholder Dialogue to Discern Culturally Relevant and Appropriate Metrics" was undertaken pursuant to a Department of National Defence Defence Engagement Program Targeted Engagement grant from 2018-2020. In close cooperation and partnership with 1st Canadian Ranger Patrol Group (1 CRPG), the project team developed a series of metrics and indicators that might be used to evaluate the contributions, successes, and shortcomings of the Canadian Rangers as a component of the Canadian Armed Forces Reserves within a Northern Canadian context. The report blends descriptive, explanatory narrative (with extensive first-hand quotes providing the insights of Canadian Rangers in their own words) with specific, measurable outcomes.

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